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REQUIRED READING FOR JANUARY.

JOURNALISM.

BY GEORGE PARSONS LATHROP.

A well-organized newspaper force is something like an army—or like a division or brigade, operating under independent control of the commanding general. This likeness is not fanciful. To bear it in mind will prove useful to the beginner; and this is the reason why I wish to impress it upon him.

The individual writers who furnish the matter composing a single issue of a great daily newspaper are like soldiers fighting a battle, because each is doing his part toward a certain result without knowing much about what the rest are doing at the same time. All of them are under orders; but only the commanders, or heads of the force, are aware of the details, and they shape the whole result. The writers are unlike soldiers, however, in that they do not enjoy the benefit of a special period of drill before entering the service. They have to take the field at once, alongside the veterans, and get their training from actual duty there.

Let us examine the organization of which the recruit becomes a member. A newspaper is divided into two general departments: I. *Editorial*. II. *News*. The editorial department takes precedence, because at the head of it is the editor-in-chief of the paper, who is the commanding general. We may talk of the republic of letters; and we may assert with perfect truth that individuality of mind is very valuable in subordinates, when rightly controlled, and confined to its appointed sphere; but a good newspaper office is neither a pure democracy nor a model republic. It is an absolute despotism. The editor-in-chief must be an autocrat; and the head of every division under him should be an autocrat in that particular division.

The editorial department has a staff of editorial writers, who hold the highest, or, we may say, the most distinguished rank of all, next to the editor. In some newspaper offices there is a chief editorial writer, who leads the rest and has discretionary power to print, exclude, or modify editorial articles written by other members of the staff. A natural subdivision is made among the editorial writers, according to the special faculty developed in each. One will write mainly on national politics; another, on local politics; a third, on political economy and finance; others, on foreign

affairs, or on important sociological, scientific, and religious topics. There should also be a man or two on the staff to furnish editorial articles of a lighter character, with a dash of humor and satire; and sometimes a literary diamond is unearthed, with scintillations that cause him to be known as "the funny man." The funny man, of course, may crop out in some other department, and his contributions may take a form different from the title editorial, or the editorial paragraph; but, however amusing he may be, he generally has to do serious work, as well. No arbitrary subdivision can be made; and each editorial writer is expected to respond to any demand upon him, outside of his specialty, as the need of the day may require.

Beside these men, there are in the editorial department a literary, a dramatic, and sometimes a musical and an art editor, who in addition to their critical work may now and then contribute paragraphs and title articles to the editorial columns. Frequently the art and musical editors are expected to combine with their special work some other regular function; but this is rather a cheap than a truly economical measure.

In the news department we find a more complex arrangement. At the head of it is the managing editor, who is directly responsible to the editor-in-chief. The managing editor must arrange the details of getting news, and putting into the proper channels all news matter which comes in, so that it may be prepared for publication. He is obliged to maintain a general supervision of the whole paper, excepting the editorial page; acquainting himself with the scope and quantity of telegraphic news; outlining the treatment of newsy subjects from all parts of the country; keeping a sharp look-out for copy for the numerous departments, seeing that it is supplied on time, and deciding whether it is to go in at once or be postponed. In this way he has a large control over the "make-up" of the paper. Frequently, also, he suggests subjects for articles of general interest, or decides upon them when contributed. The extent of his authority in this direction depends somewhat upon the disposition of the editor-in-chief, who may prefer to have these matters submitted to himself.

Under the managing editor, again, comes the city editor, who has complete charge of the body of local reporters. Of these there may be, on a first-class daily in a large city, from twenty to forty, or even as many as sixty. From among them may be drafted certain men to go out and report events in other places. But there are also journalists whose work, though involving the faculties and duties of a reporter's function, places them in a class higher than that of most reporters. I mean the special correspondents, who are sometimes evolved, by natural or artificial selection, from reporters; and, in other instances, may never have acted as ordinary reporters at all. They, together with the regular correspondents who are employed in sending dispatches and letters from numerous cities far and near, must act in concert with the managing editor.

Naturally, neither this officer nor the city editor can remain at his post both day and night. It is, therefore, quite common to have a night editor, who, after the managing editor has left the office, takes charge of the general making up; directs on what page or in what column each article shall go, and orders changes in the arrangement whenever forced to do so by an emergency; always trying to carry out so far as he can the orders given him by his superior. He must hold in his mind a complete mental map of all the columns in the paper, and remain on the spot until all the "forms" have gone to press. When late news conflicts with an editorial already in type and assigned to its place, the night editor should be empowered to throw out the editorial. His labor and responsibility are frightfully exacting and exhausting. It used to be said that five years was about as long as an average man could stand the strain, on a large New York daily. I remember the pathetic instance of one very efficient night editor, who died within that term, worn out with the nervous tension. He was young, but his hair had rapidly turned gray. At the moment of his death he cried out, "For God's sake, send up that last form!"

The city editor, in the morning, makes what are termed "assignments" for the various reporters; *i. e.*, orders as to the particular subjects they are to investigate, or events that they are to chronicle, or interviews which they are to seek. These are entered in a book. If he leaves the office, say at six in the afternoon, he should first confer with his night reporters as to their work, and then he must delegate control of his department to some assistant or subordinate, for the evening. The editor-in-chief often gives a great deal of attention to the night-work; Mr. Whitelaw Reid, even after he ceased staying at the editorial office of *The Tribune* in the evenings, for a long time kept up the habit of supervising important points by private wire from his house, until midnight. Where this is not done, the night editor becomes the autocrat *pro tem*. The editorial columns must be made up at night either by some one regularly appointed to that task, or by the editorial writers in rotation.

Then there is the telegraph editor who, in some offices, is set to watch the latest dispatches as they arrive, and write short comments on the most important of them.

The financial editor has to supervise the market reports, and get in a luminous and comprehensive review of them, each afternoon, as promptly as may be.

The sporting editor, also, has his special duties, which are by no means easy, in reporting, with his assistants, horse and yacht races, base ball, athletic games and matches, etc.

The exchange editor, who properly belongs to the editorial department, is a man whose value is little understood outside. He is obliged to read scores of papers, every day, from all parts of the United States, and, with sharp shears

and a still sharper discerning eye, clip out whatever may be of interest to the several departments and the various editorial writers; marking and distributing these extracts. His is a marvelous faculty; his work is most wearing and requires unflagging industry, with excellent judgment.

The managing editor, beside directing his sub-commanders and receiving their reports, ought to consult with the editorial staff frequently, and must report to and receive orders from the chief, all through the day. There should also be a daily council of the chief with his editorial writers, to determine policy and plan the next day's campaign. Thus the two great divisions are brought together and act in concert.

Now, as to actual experience and qualifications. The beginner will probably start as a reporter, and will often find it disagreeable, humiliating work. A college graduate, of the highest scholarship, may be sent out to report fires; which, by the way—with the confusion and excitement of the scene, the rapid action, the difficulty of getting the names of owners and tenants of the burning buildings, the amounts of loss and of insurance—is one of the hardest jobs in journalism; probably, next to a presidential nominating convention, the most difficult. He must despise nothing, however. He has to do whatever is laid out for him, with all his might, and then be ready to be treated with snubs or insolence by a superior. Some reporters are salaried, but the best and most intelligent generally do "space work," being paid by the piece; but mere "padding" will not be allowed, on a good paper. It will be "edited out" by the "copy handler." The first-rate reporter must know when to "spread" and when to be succinct. The average reporter's salary would be about twelve hundred dollars a year. "Space work" may bring a bright man seventy-five dollars, rarely one hundred dollars a week. Taking all reporters together, it is not probable that the average earning throughout a whole working life would be more than thirty dollars a week; and this wage is won at an enormous cost of physical and mental exertion; for the hours of work required range from ten to eighteen a day.

It is often difficult for a reporter to make his way into any other position; but it is a good idea for the aspiring journalist to familiarize himself with the various departments, and to offer editorial and other writing, in the hope of enlarging his field. Yet he will have to do this meekly and without interfering. Newspaper offices are full of jealousy and mutual criticism, and the young man must tread softly and speak low. Do not shirk a new task, or an added burden, if you can take it; for you may learn something from it. On the other hand it is not desirable to be crushed with overwork. The young journalist has to reconcile modesty and obedience with extreme boldness; not an easy union. I recall a journalist of considerable note, once a managing editor, to whom I applied for work. He frightened me out of my boots, at first, by his gruff manner. Finally he printed a four-line squib in verse and, penetrating me with his eyes, said, "That's about the sort of thing you can do for us." I was surprised, but thought he must have gauged my utmost capacity. Since then, I have found that I could do several other kinds of journalistic work. Still, it probably did me no harm to be impressed with so moderate a view of my powers, at that time.

Much later on, I was reporting some meetings for a New York daily, by mail, and had been absolutely instructed to keep within certain limits which I knew to be too narrow. An important occasion came, and I sacrificed it to my positive instructions. Promptly I received word, "Another time, throw regulation reporting to the winds." I made no

reply, but seized the next occasion for a long verbatim report. This illustrates the necessity of boldly disobeying orders, on occasion, and taking the risk; but you are quite as likely to be condemned as to be praised. The best way is for head-quarters to grant room for discretion at the outset. Offices differ greatly as to this. The autocracy may be harsh and inconsistent, or it may be bland and benevolent, knowing when to trust subordinates.

The details connected with other posts than the reporters' are infinite. It is painful to see a pale man, under a glaring gas jet, reading the tissue-paper copy of telegraphic news, putting in punctuation, crossing out words, marking paragraphs and pasting sheets together or impaling them upon a spindle, with an air of fatigue as if he should die the next moment. He is the "copy handler"—a man unsuspected and unknown by the outside public, all his life long, yet invaluable in the office. His and a thousand other dreary little chores have got to be done uncomplainingly by newspaper men night after night, year by year. Then there are the "head-lines" to be written, every word considered with reference to the number of letters, so as to make the type fit the space; and so on. It is surprising how many faculties are brought into play. There are sundry little niches to be filled by peculiar ability. Bronson Howard, now a famous playwright, was remarkable as a copy-handling journalist for his power of condensing or "boiling down" copy, by striking out needless words; a power since put to use in his dramatic writing.

The obituary editor, also, is a monument—one might say a funereal monument or human cenotaph—of long-suffering and self-denying journalistic toil. Month in, month out, he keeps track of notable persons, gathering fact upon fact and adding each to the ante-mortem cairns which he is raising in view of their death. He rolls up and pigeon-holes his obituary notices, to sleep but not to dream; for they always have one eye open, and are ready to spring out of hiding, the moment a distinguished man or woman expires.

Writing editorial articles is an art by itself. Many authors of good novels, essays, treatises, are unable to master it. The "editorial" must be at once timely, brief, well informed, clear, comprehensive, and pungent. On the other hand, some of the most skillful and forcible of editorial writers never can learn to do any other journalistic work.

A good "all-around" journalist, even among chief editors, is an extremely rare bird. It may as well be said here that a man who has not intelligence and equipment enough to rise to the position of editorial writer, special correspondent, or managing editor at a large salary, or editor-in-chief, need not hope for large rewards from journalism. Exceptional salaries in the highest positions range from four thousand to ten thousand dollars a year. The tenure of place is most uncertain. Engagements are usually verbal, and salaries are paid weekly, with a chance of discharge at any moment.

No special training can be laid out. There is no prescribed road to success. As to what a journalist should study and know, Charles A. Dana has said to me, "The more the better—that is the only rule." The use of miscellaneous but complete knowledge was shown in the case of John Foord, who, on the death of Charles Dickens, was able to sit down and write in one night a whole newspaper page—thousands of words—about the great novelist. It turned out that Mr. Foord had delivered lectures on Dickens and, having memorized them, he had the whole subject at his pen's end and his mind's front.

Schools of journalism, like business colleges, might teach students their profession; but the trouble would be in having a large staff and collecting real news. No school should attempt to confer a degree, for this would only hamper the tyro when he came to the test of real work. Practical experience on an actual newspaper is the only valuable school.

The prime objects of a real newspaper are:—(1) To give news, comprehensively and concisely. (2) Entertainment of the public. (3) Instruction. (4) Influencing public opinion. I have adopted this order advisedly. All these purposes are more or less modified by the desire of the management to make money. Ideal aims will frequently combat those of the counting-room, and find themselves lopped off and diminished, accordingly.

The chief requisites for beginners in journalism may be summed up thus:—

1. A good English education. Learn first to write English; I mean plain, straight, quick Saxon, sturdy and lithe as a sapling. Let your Latin and Greek adornments come in afterwards. Study the history of the world, of the United States and Great Britain and Ireland; and study everything else that you conveniently can. Drill yourself in writing swift, sharp, vivid yet graceful accounts of everything that comes under your notice, putting it picturesquely but never at the cost of clearness and brevity. Colleges do not teach this art.

2. Common sense.

3. Good judgment of the relative importance of subjects.

4. Obedience, patience, punctuality.

5. In spite of attaining to all these virtues, do not be a prig. However much knowledge your brain may hold, never do or say anything which will lead the wise to charge you with being touched by the malady known as "big head." Conceit, the wise it call.

That there may be exceptions to these rules is true enough. There are good journalists who are not well educated, patient or in any way humble. But I am speaking of the ideal journalist; and it will not do for the novice to model upon the exceptions.

THE UNIVERSAL COLOR MAKER.

BY CHARLES BARNARD.

Get a piece of light red cloth, another piece of bright green, and a piece of cloth of a deep sky-blue. If not convenient to get cloths of these three colors, get colored papers or even colored wafers. Every member of the C. L. S. C. is an experimenter, a learner, and the most common things will teach if rightly used. We will call the colored objects paper. Place the red, green, and blue papers in a good light on a black cloth or anything else that will answer for a dark background.

These papers are red, green, and blue, you say? How do you know? Can you prove it? They are colored. Are you sure? Take them into a dark room. Are they colored now? You cannot tell, because you cannot see them. Precisely, because all things are black in the dark. Were you to light an alcohol lamp in the dark room and then scatter fine salt in the flame, there would be a flare of yellow light and in its momentary glow you would see that the three papers had changed color. The blue would be black and the green a

dark olive and the red a deep orange. The experiment can also be performed with the blue flame of a gas cooking stove, by sprinkling fine salt in the flames in the dark. Every girl knows that some blues change color in gas light in precisely the same way. As the experiments in the dark may not be done by all, you can test the matter in another way. Place the red paper outside the window on the sill, in a good light. Close the window and hold the blue paper near the glass at an angle of 45° or in such a position that you see its reflection in the glass. You now see the red paper through the glass and the blue reflected in it. Carefully move the blue paper about till the reflection comes directly in line with the red paper. At once you see the red card has changed to a beautiful purple. Another way to perform this experiment is to look in a store front where blue curtains are used and if there are red brick buildings opposite or if any red object passes in the street, it will be reflected in the glass and against the blue curtains will appear to be purple.

These experiments show us that we cannot believe our own eyes, that these colored objects are not in themselves colored. We say the red paper is red. It is not of itself red, because when the light is removed it is black. Where, then, shall we find its red color and why does it appear red at one time and of another color at another? Why is it one paper is red and another green or blue? Why are they colored at all?

For an answer to these questions we must turn to the Great Star we call the sun. This self-luminous star gives us light, and from light comes color. We could prove this by experiment, but the apparatus for the work would be expensive and troublesome and we must accept the opinions of those men of science who have investigated these matters.

The sun is a source of light. A lamp, a flame, an incandescent wire, anything heated white hot may be a source of light. As sunlight is the most common, we will consider it first. The light of the sun meets the eye and gives us a sensation we call color. It falls on the hand and gives a sensation of heat. It has also another effect as when it causes our carpets to fade. A man totally blind has no sensation of color. If there is no light, as in a dark room, there can be no color, because the eye receives no impression—it is without sensation. A pinch of salt thrown in the flame of an alcohol lamp gives us a peculiar sensation, and we call the sensation yellow. We say the flame is yellow because we have a sensation in our eyes, and we have agreed to call this particular color-sensation *yellow*. The light of the sun gives us a sensation we call *white*. A beam of sunlight in a room falls on the wall and makes a white spot, or, as we say, a spot of white light. Now this white light is composed of three distinct colors.

In our studies of light in THE CHAUTAUQUAN for November, we saw that light can be reflected. Every object reflects light to a greater or less degree. Our black cloth on which the colored papers rest, absorbs nearly all the light and reflects very little. In a dimly lighted room it might reflect none, and we could not see it at all. It would give our eyes no sensation, and we should be aware only of a blank, or darkness or blackness which is the same thing.

Each of the colored papers reflects light, but each has a special liking for one particular color. The red paper absorbs all the colors in the sunlight except red. This particular color it picks out of the whole mass of colors in the light and reflects back into our eyes and gives us a sensation we call *red*. It is not red of itself. It only makes a peculiar impression on the nerves of the eye, precisely as sugar gives a sensation called *sweetness* to the tongue. The green and

blue papers in like manner pick out particular colors and, absorbing all the rest, reflect these into our eyes, and we say we see a blue or green paper.

Color is, therefore, wholly within ourselves. It is subjective and not objective. The blue paper in the dark room, in the yellow light of the burning salt, appeared black. It found no blue light in the yellow flame and it was, so to speak, dumb. It could not reflect yellow, and there being no blue, it gave the eye no sensation whatever, and we said it looked black. It was Dr. Thomas Young¹ who first tried to explain this most curious matter. He said that the eye had three sets of nerves, one set was sensitive to red light, another set to green light, and the other sensitive only to blue light. When we see a red object, one set of nerves is excited, but the other two sets are quiet. It is the same when we see a blue or green object. This theory, though not exactly in these words, is known as "Young's theory of color-sensation," and it is now generally accepted by men of science as offering the best explanation of the matter. Understanding now that sunlight contains all colors, that colored objects absorb certain colors and reflect others, and that the eye receives three impressions of color that we call red, green, and blue, let us experiment in this matter and see what more we can learn.

It was Sir Isaac Newton² who first showed that by means of a glass prism, sunlight can be split up into its several colors. Procure a prism (and this should be done, if possible, as the experiments with it are capital for Circle work) and close the shutters at a sunny window so as to leave only a small hole through which the sunlight may fall. Place the prism, with one edge downward, in this beam, and on the wall or a white screen will be thrown a band of colored light. The sunlight is now split into its various colored rays and we see the *solar spectrum*. It is the same as the rainbow and the colors are red, orange, yellow, green, blue, and violet.

There is a vast deal we could learn from this beautiful spectrum. It is fascinating in its singular, half magical appearance in the dark room and we could spend many hours in experimenting with it, had we time. Hold the red paper in the spectrum and move it about. In the red it is vivid red. Move it along and it changes color till beyond the green it is quite black. Hold the green or blue papers in the different parts of the spectrum and the same remarkable effects are observed. We readily see that the effects are the same as when the blue paper was black in the yellow light.

Lay a narrow strip of white paper on the black cloth in a well-lighted room and look at it through the prism, and we see the solar spectrum again. Place a strip of the red paper on the cloth and examine it with the prism, and the spectrum will be good at the red end and faint and dim at the violet end. Examine a blue strip in the same way, and the spectrum will be faint and dim at the red end. It is evident that there is very little red in the blue paper, and the spectrum is, therefore, blank at that end. These experiments plainly show that sunlight contains all colors and that colored objects really absorb all the colors except those that appear to the eye.

For those who have no prism we may try other experiments. Put the red paper outside the window and holding the green paper inside the glass, repeat the experiment tried with blue and red paper. Now when the two papers are seen together the red appears pale yellow. Try to think what has happened. The red excites one set of nerves in the eye and gives one sensation. The green excites another set at the same time. There is a double sensation which we call *yellow*. (In performing this experiment always place the

brightest color inside the window.) If we lay a narrow strip of yellow paper on the black cloth and examine it with the prism we shall see a red and green spectrum—plainly showing that yellow is composed of red and green. Try violet and green in the window and you will have blue. Red and blue or violet will give purple as we saw in our other experiments. So it appears that the eye while sensitive to only three colors can see all by combination. The following diagram shows how the combinations are made :

Red.	—Green.—	Violet.
Yellow.	Blue.—	
	Purple.	

These are all the colors to be found in nature : red, yellow, green, blue, and violet. Purple is not a natural color in light and can only be produced by combining red and violet lights. All objects, whatever their color, affect the eye and give one of these three sensations or any two of them combined or all of them combined. A white flower excites all three nerves. An orange excites the red and green but more the red than the green. A canary color excites both, but more the green than the red. The blue sky appeals to one set of nerves or a little of the green and more of the blue according to its tone of blue or violet.

Place a small square of the red paper on the black cloth. Look at it steadily for a whole minute and then quickly look away at a piece of gray paper. In a few seconds there will appear a faint, ghost-like image of the paper, but in green. Try green and a reddish image will be seen. Try bright yellow and a beautiful violet will be seen. Try other colors and most singular colored ghosts will be seen and each time the transient image seen on the gray will be the contrasted color of the object seen. This experiment is one that can be done in the circle by means of sheets of colored paper against a black screen. Have it brightly lighted and let the whole circle see it and then let all turn their eyes to a white plastered wall or to a screen of pale gray cambric. The explanation of this singular appearance is that when one set of nerves, say the red, is excited, they soon become tired, and when the eye is turned to a neutral color like gray, the other nerves, that were also partly excited though very feebly, have a chance to be impressed, and from the gray they pick out their own colors ; the red in gray being unable to affect the tired red nerves. The experiment plainly shows that there are separate sets of nerves for the three colors in sunlight.

What are the lessons these experiments teach, and how are these facts related to astronomy? In the first place, the Great Star that gives us light is the universal color maker. It is the sun that paints the rose. The rose may blush and reflect only its red beams, yet were there no red in the light, the rose would grow black in the face. All light contains color. A gas lamp contains much yellow and only a little blue. Salt in burning gives a light that contains red and green, and the double sensation it gives the eye we say is yellow. Copper gives in burning a green light. Other things give flames of different colors.

Light the alcohol lamp or the blue flame of a gas stove in a dark room and procure a piece of linen thread. Burn a little of the thread in the lamp or gas flame and it burns with

a light yellow flame. Now draw the thread several times through the hand and then burn it. This time the flame is larger and of an orange yellow color. Here is the color of burning salt. Plainly there was salt on the thread obtained from the salt perspiration of the hand. We, therefore, prove the existence of salt on the hand though we cannot see it. If a fine beam of sunlight be examined by means of a certain form of prism, the yellow of salt will be seen in the spectrum. The sun is ninety million miles away and yet we prove that the flame of sodium exists in the sun.

No greater invention was ever made for purely scientific purposes than the *spectroscope*; no greater wonders in astronomy were ever discovered than by its use. By means of this remarkable instrument we are enabled to examine the light of the sun and of the most distant stars. The work is called *spectrum analysis*. Every light has its own spectra. Everything that burns, and all things will burn at some temperature, has its own individual colors in the spectroscope. Thus, if we know the spectrum of burning hydrogen, and see this same spectrum in a star, we infer that the light from that star comes from burning hydrogen.

We see at once an immense widening of the heavenly horizons. All things are in common. One mind must rule the universe, for it has made all worlds of the same materials. That which we see on our little earth exists in the sun and in the most distant star whose light has been years on years flying across the vast, dark spaces of the universe to our eyes. There are stars, no doubt, beyond the reach of our most powerful telescopes. At least they dimly glimmer at times and the spectroscope tells that they are of the earth, earthly. There is a true brotherhood of stars for of the same materials has He made them all. Who can tell where the stars end, who can put a limit to the universe and yet by means of light and color, all worlds are proved to be one?

There are many other experiments in the study of color that can be performed in local circles. Colored glass might fill a whole evening of study and experiment. Such glass selects its own color by transmitted light (light going through), as the rose shows its color by reflected light. A drop of aniline ink dried on a thin sheet of paper is purple by transmitted light and bronze green by reflected light. Try it and see. There are hundreds of other things we might learn in the study of color. It is all about us, it is one of the two great forms of beauty, and no more valuable study can be taken up than that expression of God's mind we call beauty. We *must* learn or we shall be left far in the rear by the children of to-day. I once knew of an advanced child who was so highly cultivated in astronomical lore that she forgot her nursery rhyme and on being shown a star said with great feeling,

"Twinkle, twinkle, little star !
I know exactly what you are ;
A glowing ball of burning gas
Revolving round your central mass."

"Twinkle, twinkle, little star !
I know exactly what you are ;
For to my spectroscopic ken
I see you're only hydrogen."

SUNDAY READINGS.

SELECTED BY CHANCELLOR J. H. VINCENT, LL. D.

NOT BY MIGHT BUT BY SPIRIT.

[January 2.]

Often among men it has been the gentlest, most quiet ministrations which have produced the greatest results. When Edward had starved Calais¹ into surrender, and held the city which he had so long besieged, it was in his power to destroy it; but the people preserved their city and preserved their lives, "not by might." He said that he would spare the city if six of the citizens would give themselves into his hands; and six of the leading men came out, stripped of their raiment, every man with a halter about his neck. They bore the keys of the city; they threw themselves at the king's feet; they gave themselves unreservedly into his hands, and asked for his mercy. They were answered with a call for the executioner. There were his knights, and there was the great army, but they had no power over him. He was the monarch, and all power was with him. Then Philippa² knelt at his feet and cried, "Ah, gentle sire, now pray I, and beseech you, with folded hands, for the love of our Lady's Son to have mercy upon them!"

And the king answered, "Lady, I would rather you had been elsewhere. You pray so tenderly that I dare not refuse you; and though I do it against my will, I give them to you." So the lives of the men were spared, the peace of the city was saved, and the honor of the king and the English people was preserved, "Not by might, nor by power," but by the spirit of a woman's prayer.

If we look upon the rulers of the world, in the various departments of life, we find the same principle at work. Great armies do not of themselves win the victory. It is the silent counsel of the men at the head of the army. Great statesmen are not by their open deeds controlling men; it is more by the thought wrought out in their chambers. Great artists are not artists by force of physical power, but by a certain spiritual character which belongs to them, which never can be imitated, and into which no training can ever bring a man. An English painter said, "I mix my paint with brains." Guido³ said of Rubens,⁴ "He mixes his paint with blood." Surely it is this genius which, working within a man, makes him able to control others through that which he does before their eyes.

Again the force which works in woman, which gives her that marvelous influence which is scarcely second to any thing in the world to-day, is a force which is not gained by noise or by pushing forward into prominence. But in her own place, with her voice, with her example, with her training of children, with all that is beautiful and strong in her character, she gains control of the thought and method of those whose work is more manifest and more resounding through the world.

The whole march of civilization is upon this line. Every gain we make is a gain of spiritual over material force. It is the putting away of armies, the forces of war; it is the withholding of physical control; it is bringing out reason, conscience, and those immaterial and invisible forces which have their seat in the heart of man, and have the field of their working in the hearts of other men. As civilization goes on from this immature state toward its completion, more and more shall we find the working not of might, nor

power, but of spiritual energy, of spiritual influence over the hearts of men.

If this be so within this little domain of ours, where we have this influence one over another, still more is it true when we reach out into the eternal working of God and seek to find in what way he will bring his own purposes to pass. It is not by great, astounding works—by the thunder of his voice, by the roar of his tempests, by the flashing of his lightning—that God seeks to control men. It is by the Virgin's Child, born in a little village, in an obscure province, the spirit of whose life is, "He shall not strive nor cry; neither shall any man hear his voice in the streets;" who is ordained for his ministry by the descent of a dove upon him, and who finds his work in the world when John the Baptist, with his loud voice, has receded; when he baptizes men not with the water of Jordan, which they could see, and whose flowing, falling drops they could watch, but with the spirit of the living God in their hearts.

Even this is not to be continued. This visible presence must be withdrawn. St. Paul says, "Though I have known Christ after the flesh, yet now henceforth know I him no more." He would not know any one whom he could see; he would not hear any one whose voice fell upon his ear. Only spiritual vision should control him; only spiritual utterance should guide him; for there had come, when Christ had vanished from the earth, as it was expedient that he should do, the reign of the Spirit, the Holy Spirit, who should, because he is Spirit, control the spirits of men who control themselves and govern the world.

[January 9.]

Hence when we come to this spiritual era, we come into an advance, a sudden and marked advance, of this spiritual, unseen agency. That day which stands out from all the days of Pentecost, as the Day of Pentecost, is not thus distinguished by the "sound as of a rushing mighty wind," for there had been a rushing mighty wind ever since there had been a wind to blow. The grand, distinguishing peculiarity which separates and signalizes the Day of Pentecost is the coming of a spiritual power, unseen and mysterious, which, descending out of heaven, finds its way into the spirits of men, and there works its holy and divine pleasure; and that which is still the highest in all Scripture, as in all human thought, is this spiritual presence.

If we take that work which is yet to be done in the world, to win the world unto the love of Christ, still it is the same spiritual work, bringing men into new lives, that they may have a new destiny of righteousness and of eternal life. Truly, as one reads it again, there comes a fresh interpretation of an old Scripture. So many say, nowadays, that the Old Testament is harsh and unkind. I suppose they say so because they do not read it. You can say what you please about a man whom you do not know. One who knows the Old Testament will not say that. But how beautiful, how enlarged, how strong, how precious, becomes the Old Testament thought in the light of the New. For it was an Old Testament saint who said, "Thy gentleness,"—thy quietness, thy patience, thy love, not thy might nor thy power,—"thy gentleness hath made me great."

Thus it must be always ; and we are not surprised at this the moment we think who the Holy Spirit is. It is not the wind, it is not light. It is the Spirit of God entering into the spirit of man. The Holy Spirit is God. If any one shall say the Holy Spirit seems sometimes to be spoken of as an influence proceeding into the world, still it is God's influence. There have been persons who have doubted the divinity of Christ; I believe no one doubts the divinity of the Holy Spirit. It is God's influence, if it is an influence. Rather, it is God having influence who is the Holy Spirit. When one thinks how great God is, and how near he can come to us because we are spirit as he is spirit, then he finds the provision for all this that shall come.

Hence we find, passing from the Old Testament to the New, how a word which there is set aside in the sentence of the prophet, comes from the lips of the Christ with all its force strengthened, and becomes one of the telling and inspiring words of the Gospel truth. "Not by power," said the prophet ; and Jesus said, "Ye shall receive power after that the Holy Ghost is come upon you." "Not by God's hand," said the prophet ; "By my spirit," said the Christ. "Not by what shall be done outwardly upon men, but by what shall be done in the hearts of men," said the prophet. "Ye shall receive power over the hearts of men," Jesus taught, when on the Mount of the Ascension he gave his last promise to the disciples whom he was to leave in the world. The power is that which makes human efficiency and accomplishment.

[January 16.]

Knowledge is said to be power. Knowledge is power in the same sense that wood is fuel. Wood on fire is fuel ; knowledge on fire is power. There is no more power in knowledge than there is in the stones or stars which you know, unless there be a spirit and life in the knowledge which give it its energy. In proportion as men have this spiritual power do they become strong in the world.

If I may borrow the illustration from one of our own writers ; when Eric⁵ starts from Greenland in robust health he will steer west, and his ships will reach Newfoundland. But take out Eric and put in Biorne or Thorfinn, and with just as much ease the ship will find New England. The difference between Eric and Biorne is a difference of spirit. The difference between Peter on the day of Pentecost and Peter before, is a difference of spiritual power. Hear his last question before he comes to the Ascension : "Lord, and what shall this man do?" Hear his question on the Mount of the Ascension : "Wilt thou at this time restore again the kingdom to Israel?" Hear his words when the Spirit of God has descended upon him ; words which have never ceased ; which have brought men by thousands into the new life by the cross. Take Saul of Tarsus with all his madness ; he learns no new philosophy at Damascus, gains nothing of that which is accounted knowledge. There comes upon him, after he has gone into the city, the Holy Ghost, and St. Paul from that hour outstrips all others in the greatness of his accomplishment in the hearts and lives of men.

Power comes to knowledge to give efficiency. Knowledge without power is like the heir-apparent to the throne. He is of royal blood, but he has no authority. Knowledge with power is the prince on the throne, with the crown and scepter.

Power comes to good resolution to give it efficiency. This is weak ; it is worthless in itself. "I will arise and go to my father," is a purpose, and the man is as hungry and as ragged after it as he was before. "I arise and go to my father ;" that is resolution with power in it.

Duty comes to us as something hard, and we shrink from it. No one is a large man if he does not feel that his duty is larger than himself. Our ideas of duty are too petty, and too low, if we are able of ourselves to change them into the deeds. It never was meant that a man by himself should do his work.

[January 23.]

The Sermon on the Mount is beyond every one of us. But with the Sermon on the Mount comes the promise of power by which we can meet its duties ; and when we take the commandment with the power which accompanies it, then we can do our duty. God who gives the duty, gives himself to make us strong for the duty.

"When religion ceases to demand the impossible, it ceases to be religion," some one has said ; and it is a simple and profound truth. So, in our way of attainment, we look at these visions of Christian character, and how far beyond us they seem as they are presented in the New Testament !

And who can ever come up to this excellency of heart and of life, to be perfect, to be holy ? We do well to despair and say, "It is a dream, this thought of being so great. It may be for apostles ; it may be for pious women ; it is not for business men."

It is for business men. Business men are to be saints. Business is to be as holy as praying, or we have no right to touch it with one of our fingers ; and our common occupations are to be as holy as the work of the angels. Can it ever be ? Of course it can never be. Let us abandon all hope of it. Then let us make it true. For Jesus says, when he sets before us this lofty ideal, I will give you power ; I will bear your thoughts up ; I will inspire your purposes ; I will attend you through all the strain and stress of life, and you shall be clean, for I will make you pure. When Christ keeps a man, there is not pollution enough in the world to stain his garments ; there is not heat enough in the furnace to put the smell of fire even upon his robes.

Or, if we think of Christian work which we are to do for men as ministers of God's grace, again we shrink from it. How can we bring men to the Saviour ? "It is of no use for me to speak to my neighbor," a man says. "There is very little comes from preaching the gospel," men say. "There is very little good comes from the Sabbath-School," some think. There is truth in these words and thoughts. Not by the might of words, not by the power of preaching, when a man's lips utter the truth to human ears, can the work be done. But when the school becomes filled with the spirit of God ; when in every teacher's heart is the Holy Spirit speaking through his lips ; when the Spirit of God gives you truth to utter, and prepares the heart of the one to whom you shall speak it, and when you obey the Spirit, then your ministry becomes a power in the world.

It is not strange that our lives seem to us so weak. There are some of you who are wont to express your discontent with life and its results. You are discontented, and it will grow worse and worse. You will go through a series of disappointments, and on your dying bed you will say that life is a failure, and it may be you will tell the truth. It may be a failure. It is a pity to work hard fifty years and then die with little done. But we do. We are not equal to life ; we cannot bear its temptations ; we cannot meet its duties ; we cannot fulfil our purposes ; and it is in vain that we rely upon might and power.

"But have I not all my years attended church?" one may ask. "Do I not try very hard to do right?" Very likely. "Not by might" do men do right ; "not by power" do men fulfil the end of their being, "but by my spirit, saith

the Lord of hosts." Only God is as great as a human life. A man is not large enough for that which God requires of him, since sin has shrunken him to small proportions. If you will let this spirit of God come into your heart and make your thoughts; if you will let him mark out your path day by day, and then tread it; if you will listen to his suggestions and obey his word, to-day will be successful, to-morrow will be prosperous. Men will praise you, and, better than that, your heart will command you. Then, and never until then, will the voice of the Christ say, "Well done, good and faithful servant."

[January 30.]

I would save you, and I would save myself, from narrow and earthly living. I would come with you into these high and holy purposes which shall accomplish great results. But it is not by external means; it is not by the struggle of our spirits; it is not by the force of our will; it is only as the great, wise, and loving will of the Spirit of God enters into our spirit, that we become great enough.

I read only last week the instruction of an actor touching those things which are requisite for success in his calling. This writer said that there are three things necessary: talent, training—but these two would not accomplish much; there must also be what is called "inspiration." I said, "Saul also is among the prophets." If to personate somebody else; if to go through an hour's mimicry for the entertainment of a throng; if to amuse without much prospect of improving; if this demands more than talent and more than training, even a spirit within, then to be real men and to do a real work which shall make the streets safer, which shall make life happier, which shall bring the kingdom of God nearer, this demands more than might—the might of human strength; more than power—the power of a trained will. It demands "My Spirit, saith the Lord of hosts."

I suppose that we get as much return from life as we have any right to expect. Our might can only repeat the poverty of the recompense, till our failing breath shall say, "Vanity of vanities." Where is our wisdom to-day, but in opening our hearts to the strength which never fails, to the incoming of the life which is the beginning of immortality! Then shall we reign; then shall we do our daily work in the power and glory of it. Then shall man be served, and God be glorified."

It is this, let me say again, it is this which the world needs. They tell us the church has lost its power in the world. It is not true. But the church will enlarge its in-

fluence when it has enlarged its spirit. The greatest gift which you can give to your profession, to your house, to the community, is the gift of a man who lives by the power of God's Spirit teaching him, directing him, employing him, and who shall carry down into all the sordidness and earthiness of the world, a spiritual character, spiritual utterances, spiritual vision; a life that is made up by the power of the endless years.

I turn from this subject with regret. As I stand with you to-day and see how life promises to repeat its inefficiency, and that many of us are likely to lie down at last defeated, and perhaps in the grave of the wicked, I cannot cease from saying to you and to myself, that there is but one thing which can save us; but one way in which we can glorify God in our hearts and our lives; and that is, not by simply trying to be good; not by working hard to do good; it is by receiving the Spirit into our spirit; praying God to come to us and take us; to teach us, to guide us, to use us. Then God's success shall be our success; life shall be glorified, and God shall be honored.

There stands the organ, as it has stood through these minutes in which I have been speaking to you. Unless it falls in pieces, it may stand there for many years, silent as at this moment. There is no voice in its pipes; no sound issues from it. It is dumb; it is dead. If the skilled hands of the player touch the keys, you will hear the rattle, but there will be no music. Handel⁶ himself might come and lay his fingers, heavy with melody, upon the keys; there would be the same rattle which a boy could make. Dumb organ, dead, let the sexton bury it out of our sight. There is only one thing which can save it: a breath from without; a spirit which shall come as the wind comes. The air which is in this great outer world must be breathed into its pipes, and answer to the hands of a man, pouring out its obedient harmony. It will wake to music, and to thought, and life, and worship, only as the breath of the living God moves through its silence.

If it be true of an organ, it is true of a man. Only as God breathes through our reason and conscience, breathes through these lips and out of this life of ours, only then shall we utter the melody which will enlarge the harmony of the world and blend with the eternal minstrelsy of the supernal courts.

"Come, Holy Spirit, heavenly dove,
With all thy quickening powers."
Brethren, it is your last hope. But it is a hope.—*Alexander MacKenzie.*

OUT-OF-DOOR EMPLOYMENTS FOR WOMEN.

BY HELEN CAMPBELL.

For a year or so it has been the fashion in various family magazines and weekly papers, to publish stories in which distressed shop-girls, half-starved seamstresses, overworked and underpaid teachers, and the throng of semi-helpless women-earners, turn toward the country, and, developing suddenly, a phenomenally practical side, emerge from all difficulties, through the gate of poultry-raising, bee-keeping, or some other outdoor occupation.

Far be it from me, who purpose here and now, to urge feet, whether willing or unwilling, into the same paths, to assert that the way has been made harder for me by these very journals, or that their very demonstrations are moonshine. To have suggested such possibilities is something,

and thus far, women are in their debt. But their success is made always too easy. Difficulties are slurred over, and it is taken for granted that any woman with two hands and tolerable common sense, can enter, untaught and inexperienced, on a way certain to insure a living and often a fortune.

It is part of our national inheritance, this conviction that we hold the "open sesame" to every closed door, and such conviction is a happy one in so far as it lightens apprehension and lessens the weight of difficulty. But it is disastrous, in its effect on national character as a whole, ending in making us the most impatient people on the face of the earth. Immediate result, is the demand, not only in busi-

ness but in every trade and occupation known to either sex. Patient application, steady drill, the capacity for what has been called "dead work," work quite out of sight, has no place in our scheme. Apprenticeship to anything is out of date, and so it happens that in all trades or callings where long training is demanded, one finds every nationality but our own, and is met always by the remark :—

"Americans? Oh, no! The Americans never take time to learn anything thoroughly. For careful work we must always have foreigners."

The market gardens about our great cities, greenhouses large and small, and most forms of outdoor work are monopolized by Germans chiefly, content with small returns and gradual accumulation, and knowing how to make the most of every foot of soil. To them, in spite of floods of beer and a general calm disregard of all recognized hygienic laws, comes health, born of this outdoor life, competence, and the quiet mind resulting from the certainty that a comfortable living is always secure.

Next door it may be, dwells a woman underpaid and overworked, for this is the story for most women who own consciences which spur them on always to minutest fulfilment of every duty. If she has experimented at all out of her own calling in this process of earning a living, it is usually in the line of some phase of art embroidery or decoration, sent to some exchange for women's work, and adding another pitiful unit to the great sum of totally superfluous ornamentation. She may even have tried a little cake or preserve-making, but here experiment ends, and she looks wistfully toward the few successful names in these lines and wonders if the earth really holds any spot where a woman can face fate and know herself conqueror.

Or seduced by the overdrawn stories, mentioned at the beginning of this paper, she makes a few unintelligent and feeble experiments, fails disastrously, and returns to her original occupation, convinced more firmly than ever that the way is barred, and that underpay and overwork must be the story till *Finis* is written and the book closed once for all.

Is this a rather pessimistic and hopeless introduction? Not in fact, if it will only serve to make action less hasty, and respect for method a little more pronounced. There is not the slightest probability that this generation will see any Hegira of women into the country, or find them dangerous competitors with the present order of market-gardeners or florists. A love,—any genuine, deep-seated love of the country, is more often the result of cultivation than a natural gift; and the deepest satisfaction in what the country has to give, comes often to the weary worker inside city walls. For a large proportion of them, however, there has been some experience of the country in childhood or girlhood, a longing in this latter stage to escape its limitations, and at last the certainty that unsuspected limitations hedge in the city also, and that freedom dwells under open sky, as it never can in city streets.

"If I only could earn a living in the country!" sighs the worn-out teacher or dressmaker or book-keeper, with even deeper earnestness than she once sighed, "If I could only earn a living in the city!" And the sigh is echoed in countless homes in the country, where, pinned by circumstances, the tired worker wonders if there is any way open to more money and thus more freedom.

Now is the time to answer YES, in the largest capitals the type of THE CHAUTAUQUAN contains, and add an IF, set up from the same font. If you are willing to study humbly, earnestly, and thoroughly, all that the best books can tell you of the special branch you elect for yourself, small-fruit

raising, market-gardening, bee-keeping, or what not, and having studied, begin your experiments, prepared for probably the hardest and most constant of work, and it may be, for a little delay or even failure in carrying anything to the credit side of the column, then comes a time when success, with these preliminary conditions, is certain. It may never be a dazzling one, but in every case of the many known to the writer, have come certain forms of success as dear as that implied in added income, and the larger power included in added income.

First and chief, ranks the absolute emancipation from much that is held to be the bounden duty of "the average woman." The endless round of petty social obligation has no further place; that desperate "keeping up appearances" that wastes the life of half of our women-workers. There is no time for any series of calls, or even for the mending, and remodeling of old clothes that is the foundation of most women's lives.

An outdoor employment, demands first of all, a costume in which it can be easily carried on, and this costume, while it need never be hideous like the "Bloomers" of a generation ago, must be loose, and as compact as possible. As pretty a gown as the most feminine soul can desire, may await the end of the day and the freedom of evening, but the day itself must be hampered by no superfluity of drapery or system of tie-backs. Naturally, the corset departs, and the "common sense," or some equally good substitute as waist, takes its place, and here is the next gain, if indeed the gain may not sum itself up in the one phrase, "a rational costume."

An actual home is also involved in any taking up of outdoor occupations, even if it be no more than three rooms. Hall-bedrooms and dingy attics are done with forever, and the woman who has the smallest portion of the home-making faculty, comes to rejoice in every inch of even the narrowest house of her own. It is well always in the beginning of such undertaking to share it with some one reaching out in the same direction, and this adds another phase to considerations beforehand, which reduce themselves to a few fixed principles.

Two are better than one. Settle, therefore, whether there is any friend, who will share difficulties patiently and keep up her spirits, no matter what rubs may come. Then grapple her with hooks of steel, and hold fast till the fight has shown itself sure to end with your side as winners. Two can plan all details of the interblended household and outdoor work, and one will often see a clue to puzzles where the other has failed, or find some element of cheer in what, to the other, is pure discouragement.

In a single article limited as to space, only hints are possible, and it is difficult to make clear the fact I am asked to demonstrate, that outdoor employments for women can be made both profitable and pleasant. Of the various employments quite practicable for women, four prominent ones always naturally take the lead: gardening, and the raising of small fruits; bee-keeping, and poultry-raising.

All these are dependent for success upon free access to market, but there is hardly a town or village that has not its proportion of well-to-do people who would gladly buy were there anything desirable for sale. Writing at present within thirty miles of Boston, it is almost impossible to buy in the two village markets, vegetables that are really fit for the table, while fruit appears to be an almost unattainable luxury. All complain save the few who take the trouble to have gardens, but no one seeks to remedy the difficulty.

It has proved many times in the experience of workers that a market made itself as soon as there was understand-

OUT-OF-DOOR EMPLOYMENTS FOR WOMEN.

ing of a good thing to be had. The usual country garden has its rows of bean poles, its corner given over to potatoes, a few lines of sweet corn and peas, and probably currant bushes and a strawberry bed, though the last is not always certain. Tomatoes, too, have their place, and it may be, beets and carrots, but nothing is planned intelligently. There is no succession of either vegetables or fruits and by the middle of August there is generally a dearth of all the more delicate varieties. Crisp heads of lettuce the year through, herbs for flavoring salads and soups, string beans and sweet corn and peas until frost, egg-plant and okra, salsify, spinach, and kale, asparagus, celery, cauliflower;—what American expects this outside of a city?—yet these and a full list of fruits both small and large, are perfectly practicable in any garden.

To give methods of cultivation in this space is, of course, impossible. Gardening by books has proved itself to be trusted, and from the charming little personal tale of experience, "Ten Acres Enough," to the manuals on a list like that of the Orange Judd Co., the publishers of the *American Agriculturist*, there is to be had every form of instruction. "A little farm well tilled;" a plot of land, where every foot is brought under subjection, yields in proportion, far larger returns than any expanse of acres. An acre has a meagre sound but other acres can always be added, when experience has taught how to get the most from one, and one year of practical work unfolds secrets that no book has held or can hold.

In an admirable little book by the Rev. E. P. Roe, "Play and Profit in My Garden" the figures are given with less minuteness than in "Ten Acres Enough," but so clearly that it is quite possible to base accurate calculations upon them. Here as elsewhere, it is demonstrated that only the most careful cultivation will produce an article from which profit can be expected. But with this cultivation, Mr. Roe's two acres brought him two thousand nine dollars, from which after deducting expense of man, and all other incidentals, over a thousand remained, beside the fullest and freest supply of fruit and vegetables for family use.

Examining his record it will be found that in it, as in all to which we have access, the chief profit came from carefully cultivated small fruits; and this brings me to the point to be made before giving further detail, that after the careful summing up of all the possibilities of the vegetable garden, it would seem wisest for women to expend their energies chiefly on small fruits; to raise vegetables with any success requiring much more capital and far more exhausting labor.

"Few have any conception of the labor required to be done to insure success," writes Mr. Henderson, a man whose fortune has been made in market gardening, and he goes on: "For the first five years I was in the business, I can safely say that we worked, on an average, sixteen hours a day winter and summer, with scarcely a day for recreation. . . . All beginners to-day must do as I did until they get their heads above water, or else, such is the competition, they must go to the wall in the business."

The gardening referred to here was on a large scale, but even on a small one the same objection holds. With small fruits, on the contrary, while the season of picking is severe in its demand, there is never an unreasonable degree of labor, and always the winter with its portion of leisure.

I give here the figures as they stand on the books of two ex-school-teachers, one the victim of "nervous prostration," the other on the way to it, and both bent upon escape from the city. Together, after five years of grinding work, their savings amounted to just three hundred nine dollars; and after long and anxious deliberation, they took themselves

and their small possessions to a village thirty miles from New York, and leased for three years, with the privilege of buying, a small house and three acres of land for one hundred dollars a year. They had a little furniture for they had lived in rooms for a year or two, and they were women who could make even a tent hold something of the look of home. They bought Henderson's "Gardening for Profit," Roe's "Small Fruits," and two or three other standard books in the same line. They studied the soil, and the work of a practical small-fruit grower on the other side of the town, who sent all his fruits to New York, and appeared to feel neither envy nor jealousy of the new candidates for public favor. The village was inhabited by business men who went to town daily, and whose pretty houses had only the merest apology for gardens. A talk with the chief grocer of the place, revealed the fact that most of his supplies came from New York, with occasional ones from some farmer who had a temporary surplus. The story of negotiation and arrangements, of the months of patient work, and all the chances and changes of their small fortunes has no place here. It is sufficient to say that, having settled upon giving an acre to raspberries, blackberries, and currants, and half a one to strawberries, leaving the remainder as it already was, in a peach and apple orchard, with a small garden near the house, the figures at the end of the year, stood as follows:

Half an acre of Strawberries.	Dr.
Cost of plants, 7,200,	\$21.80
To plowing, harrowing and setting out one half acre,	6.40
Manure for same,	8.00
Cost of picking.	20.00
Total,	\$56.20
Cr.	

By 2,278 quarts of berries at an average price of 15 cts. per quart,

Net profit on half acre, \$285.50

The picking was done by the children of one of the farmers outside the town, who objected to their joining the throng of Irish engaged by the large grower, but was quite ready that the five should become assistants to the two ladies. The figures hold no account of the quantity eaten by their owners or by the pickers, nor is there any allowance for weeding or the general care, all undertaken and accomplished by the two. The first berries were picked the 27th of May, and from that time on, the work was early and late, till the season ended.

In the meantime the other small fruits were ripening and ready to harvest, and this is the record for them. They had been set out the previous year and carefully cut back and pruned as directed, the currants five feet apart each way, the raspberries seven feet by two, and the blackberries eight feet by two, and the few that were winter-killed, were replaced in the early spring. Cultivation had been thorough and incessant. Not a weed had more than a day's life, and blistered hands testified to the energy of the attacks.

The season was only fairly favorable, and during one week the pickers, not enough in number to gather thoroughly, could not be reinforced. Yet, in spite of drawbacks, the record held unexpected consolation.

SMALL-FRUIT—ACRE.	Dr.
To plowing, harrowing, and setting out one acre,	\$ 8.50
To manure for same,	10.00
To 580 currant bushes,	20.00
To 900 raspberry bushes,	7.00
To 900 blackberry bushes,	8.00

To plowing, weeding, and manure in second season,	16.75
To cost of picking,	85.00
	<hr/>
	\$155.25
Cr.	
By 3,056 lbs. of currants at 5 cts. per lb.	\$152.80
By 2,344 qts. of raspberries at 11 cts. per quart,	257.84
By 2,680 qts. of blackberries at 10 cts. per quart,	286.00
	<hr/>
	\$696.64
Net profit on acre,	\$541.39

It was quite evident from these figures that the pair were not to starve, and on the strength of this conviction they added various conveniences to their small establishment; a forty dollar horse whose gaunt ribs soon covered, and who came to be invaluable, for cultivating as well as for jogging about the country. A cow had been bought in the beginning, and half a dozen hens; and just at the end of the second fall, a boy of twelve, left an orphan with no one apparently to give him a place in the world, found it with the two friends and became their right-hand man.

Within five years, for this all began five years ago, the little place has become their property. They have studied methods till every foot of ground yields its utmost, and in spite of one bad season, the three acres have averaged an income of two thousand dollars, most of the ground having been given to small fruits. Only the choicest peach trees

were allowed to stand, and the space between these was planted with raspberries, far enough apart for the plow to be used as cultivator. Their fruit carefully selected has acquired a reputation that makes every quart certain of sale at a high price, and nervous prostration ceased with the first six months of outdoor occupation.

No other employment offers as large return for the amount of labor expended. It would be easy to give figures for both bee-keeping and poultry-raising, but unless carried on, on a large scale, these must be regarded rather as helpers-out of the income than as main supply. The profit per hen a year, is about one dollar; per hive of bees, ten dollars. And books innumerable may be had on both topics. Silk culture is, also, a means toward an income, but, as undertaken at home, never more than slightly profitable.

In whatever form of employment, including one or more of those mentioned, only the most patient and careful labor will secure a salable result, but, all over the country, women are demonstrating that they are quite capable of such labor. From California and its raisin-making, where one woman alone has sent out forty tons a year, to the successful wheat growers in Minnesota, and the bee-keepers and small-fruit growers in New Jersey and elsewhere, each success paves the way to another. Such an article as this can give only hints, but the writer is quite ready to answer questions, give lists of authorities, etc., and will count time well-spent, if even one woman finds that mother earth holds for her something more than standing room.

STUDIES OF MOUNTAINS.

ERNEST INGERSOLL.

CHAPTER IV.

MOUNTAINS AND CLIMATE.

One cannot appreciate how important is the influence of the mountains of the globe upon its climate, until he stops to think what weather would exist in their absence. Weather is simply the state of the atmosphere in respect to temperature, wind, dryness or wetness, and the like. What affects these conditions causes a change in the weather. Now, were the surface of the continents everywhere level, temperature would decrease from the equator precisely in ratio with the latitude, subject only to the influence of winds from the ocean, which would blow with unfailing regularity and continuance, bearing a definite quantity of moisture and depositing it, probably unceasingly, in the same place year after year. Heat and cold in climate would then be almost entirely a matter of summer or winter, or distance from the equator, and wet weather would belong wholly to the coasts and certain latitudes, while all the rest of the globe would be arid.

Recollection of the principles underlying the weather will show plainly how great a difference the presence of mountains makes. The globe is wrapped in an envelope of air, or an "atmosphere," some miles in thickness. The lower layers, bearing the weight of the mass above, are most dense and heavy, and, being in contact with the sun-heated ground, are warmest. This atmosphere, however, varies incessantly, for it is constantly striving to maintain an equilibrium and hence is always more or less under motion, the movements taking the form of winds, certain of which, like "the trades," are regular, others local and irregular.

The atmosphere can absorb water, as vapor, to a great amount, but, since aqueous vapor weighs less than pure air, the more of the former the latter takes up, the more buoyant

it becomes. Only warm air, however, expanded by its warmth, will absorb *much* water; and when its buoyancy becomes sufficient, it rises into the cold upper regions where its vapor condenses into clouds and may fall as rain.

It is naturally the air over the oceans which gathers the most dampness, and then, by the laws of atmospheric circulation, it must drift across the land, where it is bound to be cooled and shed its moisture. Now here is where the mountains make themselves felt. They pierce the clouds and rise far up toward the spaces of eternal cold. They are huge condensers. The moisture-laden air, coming near them, is cooled down to its dew-point¹ and develops clouds. The clouds strike against their frozen heads, and, chilled still more, pour out their burdens of water. The higher (and hence colder) the barrier thus lifted against the currents of air, the more thoroughly will they be deprived of their moisture, and left, as they sweep on, dry and invigorating.

Therefore, all lofty mountain systems have a belt of excessive rain on that side toward the prevailing winds and an arid region on the other. The desert-enclosing coast-ranges of Australia and Hindooostan are excellent examples of this, but the most striking is the Andean chain. Here the prevailing winds blow from the east, and without opposition sweep across the whole of low, equatorial South America. They dribble rains and saturate the lower areas of air all the way; yet encounter nothing which can condense and wring out their abundant clouds until they strike upon the flanks of the Grand Cordillera. Then the water falls; and so cold and massive is the barrier, that by the time the wind gets over and descends upon the western side, it is perfectly dry. This accounts for the utter desert along the rainless coast of Ecuador and Peru.

Follow the same chain toward Cape Horn, or trace it north

of Mexico, passing in each case out of the easterly trades into the westerly winds from the broad Pacific, and the effect is reversed, though the law holds true. In Chili the coast is the region of rains, and beyond lie the drought-stricken pampas; in California and British Columbia the mountains divide the soaked shore-forests from the hot deserts of the Great Basin and the dry plains of the Northwest Territory.

On the other hand, where hills are high enough to withdraw somewhat of the moisture from sea-winds, yet not so complete a barrier as to extract it all, their influence is toward an equable rain-fall over the whole country. That is the case in Europe, where the damp Atlantic winds can penetrate to the heart of the continent with slight hindrance, the south side of the Pyrenees and Alps getting the most copious discharge, and the steppes of Russia the least; while Siberia is totally unprotected against the snow-storms that sweep down upon her from the polar sea, and at the same time disadvantageously cut off from the Pacific breezes that temper Alaska.

No continent is so favored in this respect, however, as our own, for the Appalachians fend off the North-Atlantic gales, robbing them of dampness, while the southern coast is open to the moist tropical winds which in winter warm the Mississippi valley, and in summer carry the needed rain from the Gulf of Mexico over the whole breadth of the prairie region. At the same time the Canadian plains are refreshed by the rain-winds pouring down from the northeast. If, instead of a low coast, a rank of great mountains stretched along the southern shore of Hudson's Bay and across to Alaska, and another chain ran from Florida to the Rockies, these beneficent winds would have their moisture condensed out of them before they could pass over, and the whole interior of North America would be as rainless and uninhabitable a desert as the Humboldt basin of Nevada, the plateau of Obi, or the Sahara and other mid-African deserts which are so unfortunate as to be hemmed in by greedy mountains. Mankind is practically restricted, then, to occupying such parts of the globe as the presence or absence of mountains, with reference to rain-fall, makes tenable.

The mere altitude of mountains makes their summits cold, but the cooling influence they now exert has been largely increased by the fact that a great part of the moisture deposited upon them did not run off as fast as it fell into the rivers, but remained upon their crests as gradually melting snow, or was more permanently secured in store-houses of ice. Eternally on high, in the midst of the blazing tropics, —highest of all, there, mark you!—are set these prodigious coolers. Not only do they recapture the treasures of the hurrying winds and return them to us in showers or springs, in nourishing and navigable rivers, but they refrigerate and purify the heated air as it rises loaded with exhalations from the earth, and turn it back in refreshing currents which flow invisibly down their furrowed flanks and spread outward upon the plains. Nor are these descending winds allowed to fall upon us in the icy coldness they acquire at great altitudes.

In the first place, as meteorologists tell us, the air sweeping over high mountains is twenty degrees or so warmer than the general atmosphere at a similar level. Air at that height is, of course, though cold, expanded because there is little weight upon its elasticity. When it descends, however, it must undergo rapid compression, and in doing this it sets free a large quantity of latent heat, equal, it has been stated, "to one degree, Centigrade, for each hundred metres," [a distance equal to about twenty rods.] Such is the explanation (at least in part) of the

curiously warm winds on the west coast of Greenland, of the *foehn*² of the Alps and of our mild "chinook" winds. Air descending from on high must necessarily be dry and ready to take up a great deal of moisture; hence the rapid evaporation witnessed over wide interior plains, and the wasting of the snow, under the "chinook" which is so important a benefit to the grazing industries of our far West.

It is now easy to see why all great rivers rise only in high mountains, but it remains to be pointed out more particularly that these are living continuous rivers—not mere deluges dependent upon each storm and rushing hastily away to the sea. That calamity (for it would be nothing less) is provided against by the very height of the great mountains. These summits rest amidst eternal cold. The moisture condensed upon them is instantly locked in snow, and by its accumulation may often be pressed into ice. Above a certain elevation which, beginning at the level of the sea within the Arctic circle, rises over the equator in summer to about fifteen thousand feet above it,⁴ snow and ice lie unmelted perpetually. In winter the snows persist, and the ice advances much lower down. These cannot rush away like water. They must dissolve gradually with the growing power of the sun as the warm season approaches, to trickle slowly down numberless open channels, or through under-ground conduits, feeding little by little the ever-thirsty streams. When a freshet sweeps destructively along a river-bed, it comes from the foot-hills, or some lowland catch-basin,—never from where the mountains hoard their ample resources locked in the cold grasp of the upper air; and when the factitious supply of the vernal rains has been exhausted, with tranquil and steady meltings the savings in snowbank and glacier are dealt out to sustain rivers and springs locked among the topmost crags.

Mountains, then, are not only condensers, but store-houses, of moisture. Drafting it from every passing cloud, they dole it out in exact proportion to every stream, enabling the rivers to perform their allotted part in the economy of nature and service of mankind.

Another influence that the mountains exert upon the inhabited world, through their climate, must not be forgotten, even in so hasty a review as this,—that is, their hygienic effect.

The human body adapts itself so well to the environment, that it would probably be untrue to assert that the native population of lowlands, the world over, was less healthy than that occupying highlands, though contrasts in physique undoubtedly exist, as I shall notice later. It is true, nevertheless, that the lowlander, either when well or out of health, benefits by going to the mountains, while the mountaineer usually loses something in forsaking his native heights; it is also a fact, that among civilized races there is a higher physical and mental vigor in highland regions than elsewhere.

It is possible in this article to speak only of some broad reasons why humanity should fare better on the elevations than in the depressions of the earth's surface.

In the first place the air is purer. This is of prime hygienic importance. In the bad air we breathe may be found the source of most of our ailments. That whole great class of diseases called zymotic, which are either proved, or inferred, to be occasioned by the settlement of disease germs in the human system, might be almost or quite escaped were the air entirely free from floating matter. These floating impurities are most plentiful in the valleys and near the surface. Tyndall, experimenting in the Alps, found that in regular gradation as he ascended, the suspended

particles, bacteria^s and otherwise, in the atmosphere, diminished, until in place of several thousand in a given measure of air at the coast level, only half a dozen particles could be found at nine thousand feet, and none at all beyond that. The air of snowy summits, therefore, may be regarded as absolutely pure; and this accounts not only for the coolness and clearness always remarked, but for that marvelous azure tint overhead, which surprises all lowlanders when first they gaze upon it, or rather *into* it, for the sky there does not seem distant and solid, but just at hand, and ineffably soft and transparent.

The dryness of the air—which performs so effective a scavenger service—is another means of recovery to persons from a lesser altitude afflicted with certain diseases of the throat and lungs; while its tenuity assists in this process, and facilitates a gain in other directions, through causing an increased activity in breathing, thus gradually producing a greater expansibility in the lungs, and a stimulated circulation. A converse disadvantage of this, however, is that in cases where the heart is weak, the stimulus is sometimes too much for this organ and its auxiliaries. Defective heart-action accounts for the sufferings some persons experience at great altitudes.

The comparative equability of temperature is another favorable feature of high mountains; and a fourth is the purity of the water there, drinking water containing disease germs generated therein and washed out of the air, or holding injurious mineral constituents dissolved from the soil, being a fertile source of illness in the lowlands. Men actually *do* live in good health at the greatest heights snow will permit. In the Himalayas and Andes there are villages as high as fifteen thousand feet; and many mines in Colorado are worked the year round at thirteen to fourteen thousand feet. I myself have spent two weeks at a time in active camp life above twelve thousand feet in the Rockies without any physical disturbance and with much enjoyment; while the entertaining author of "The Abode of Snow" asserts his willingness to pass his whole life at that height, so far as health is concerned. A paragraph of his in regard to the weather of the high Himalaya is well worth quotation:

"The arrest of the clouds of the Indian southeast monsoon on the outer range of the Himalaya combines, with

other causes, to create an extraordinary dryness of the atmosphere, and this aridity increases on the steppes beyond. Hence, even when the temperature may be very low, there is often very little snow to be deposited, and the accumulations on the high mountains have been the work of ages. It has often been observed in polar and mountainous regions how great is the power of solar rays passing through highly rarified air; and upon the great heights of the Himalaya the effect of these rays is something terrible. When they are reflected from new fallen snow their power is so intense that I have seen them raise my thermometer from a little above freezing point, which was the temperature of the air, to 192° F., or between the points at which spirits boil and water boils at the level of the sea. The difference of temperature between the days and nights is not such as might be expected from the extremely rapid radiation of heat there is at high altitudes. The change arising from that cause would be almost killing were it not for the fortunate fact that the atmosphere forced up by the warmth of the day descends at night, and being condensed, gives out heat. The cold of the Himalaya has been known suddenly to kill people when they were exposed to sudden gusts of wind, though they could safely have borne a much lower temperature in still air. The wind is certainly the great drawback both to health and comfort among these great mountains; but, as we have seen, it has its advantage, being caused by the elevation of heated air from below, which, afterward descending and contracting, renders the nights endurable."

The peculiar sanitary quality of Alpine air is said to be due to its ozone, a somewhat mysterious allotropic⁶ condition of oxygen which does not often appear in the atmosphere near the sea level, nor in impure bodies of air like that of a populous city or in a crowded room. Much remains to be learned as to both the nature and precise effects of ozone; and it is yet doubtful, when it is present in considerable amount, whether it may not do harm in as many instances as it does good.

In general, it seems to be plain, that the best climates in the world are those of inland districts which have some, but not a very great, elevation above the sea.

End of Required Reading for January.

IN HOPEFUL ADMONITION.

BY ADA IDDINGS GALE.

I.

Say not of me when lying cold and still,
The throbbing pulses ever more at rest,
The proud, high, eager heart stilled in my breast,
The oiden courage missing, and the will—
Say not sweet friends—"she whom we love is dead,"
The while thou let'st some kindly tears down fall
Above the quiet face beneath the pall.
Say rather with a smile—our friend is led
Unto a higher school, e'en that high one
Where all the great are learning evermore
Those divine lessons and that mystic lore
That only by immortals can be known.
Think of me drinking deep through circling years
At Learning's living fount with poet seers.

II.

Learning forever! feeling the soul expand
Like some wan plant lifted from sodden clay
To richer soil, and sprinkled day by day
And fondly guarded by a tender hand,
Until some morn, behold! uplifted there
In gorgeous splendor, sways a wondrous bloom
Perfect in form, in color, and perfume;
So will my soul expand in that rare air,
In that rare light and heav'nly atmosphere,
Until things hidden long shall be made plain
And I shall understand and be full fain
That I, unworthy I, through longing here,
Shall sit as one amid the great and wise
Listing the surge of massive symphonies.

THE AGE OF CARICATURE.

BY FRANK BEARD.

This is the age of caricature. Never before in the known history of the world has caricature exerted the influence which it wields at the present day; almost every periodical reserves a place for the pencil of the caricaturist; it reinforces the pen of the journalist in presenting daily digests of events, beside monopolizing numerous publications devoted exclusively to this art.

In the art of printing, caricature has found a broad field and displays its grotesque forms at every opportunity; for the shrewd eye of trade is quick to see the advantage it presents to attract the public eye and impress the memory. News stands, walls, and fences, all exhibit specimens of the caricaturist's art. Although it cannot be said that this art always displays the best taste or is always pleasing to every observer, yet it is really an indication of an advanced civilization and an intelligent community.

To appreciate wit, belongs to man alone and is a part and proof of his higher intelligence; and man is the only creature who enjoys the privilege of laughter. The lower the scale of intellect, the less the appreciation of wit. Savage and barbarous communities doubtless have their ideas of a joke, and the faculty of enjoying humor exists in them, but the standard is coarse and crude. The jokes of the savage are all of a practical nature and to their more civilized brothers appear harsh and crude; but as the mind is cultivated and a true sense of the humorous is perfected, it takes delight in the more subtle conceptions of humor as found in wit, satire, and sarcasm.

Ridicule has always been used as a weapon to find the weak places in a thick skin, otherwise invulnerable to assaults of argument or invective. But in past ages its efficiency was limited because there were no facilities for disseminating it, compared with those which were afterward brought into existence; but to-day ridicule set free by the printing-press exerts its subtle influence through all orders of society; and when used in the service of justice and decorum, to hold up to the public gaze such offenders as are amenable to no other tribunal, it becomes a power for good.

The grand old prophet Elijah did not hesitate to use the keen weapon of ridicule when he held up the heathen god Baal to scorn, "And it came to pass at noon that Elijah mocked them and said Cry aloud: for he is a god: either he is talking, or he is pursuing, or he is on a journey, or peradventure he is sleeping and must be awaked."—*J. Kings xviii. 27.*

Ridicule finds its most perfect expression in caricature, and with all reverence there is no doubt that had the art of printing been in operation in those days and Elijah wielded the caricaturist's crayon, he could have executed a cartoon, the exhibition of which would have turned popular opinion against the humbug priests of Baal, so decidedly that it would not have needed fire from heaven to annihilate them.

All well-constituted persons enjoy laughing, but no well-constituted person enjoys being laughed at. "Cervantes laughed Spain's chivalry away," is a phrase which indicates the power of ridicule; when Cervantes conceived the idea of Don Quixote, he conceived one of the most perfect caricatures ever presented.

But what is caricature? Many have a confused idea that

it is something grotesque, something absurd, and ridiculous, and anything exhibiting these qualities, is thoughtlessly called a caricature. A portrait to which is appended a diminutive body, a badly-drawn effort to represent a person or object, is often called caricature. But such applications of the word are erroneous; as bad drawing, absurdity for the sake of absurdity, exaggeration for the sake of exaggeration, is not caricature.

Caricature must have a purpose, and that purpose is, invariably, *exaggeration for the sake of emphasis*. It does not matter whether the artist purposed to caricature an individual, a class, a fashion, or an idea, his success will always depend upon the attention paid to emphasizing the leading characteristic of the subject by ingenious and judicious exaggeration. For example, the features of some individual are to be caricatured: here the experienced artist first studies his subject with a view to deciding upon the most characteristic features. If they are well-balanced and regular, and the head is well-formed so that the casual observer will detect no marked peculiarity, the subject becomes a difficult one to caricature. But fortunately for the caricaturist, nature seldom forms the features so that they present no striking peculiarity. In almost every case the human face or head has some predominating peculiarity which marks the character of the individual, and can be seized upon as a subject for exaggeration. The human head has its standard of perfection, which can be reduced to certain relative measurements; any variation from this fixed standard presents the peculiarity of the individual. The caricaturist accepts the hint from nature, and by laying greater stress upon the feature than nature has done, succeeds in making an absurd yet faithful likeness of the subject.

The caricature to have any force must be personal and timely, and being personal is usually offensive. Nevertheless, though caricature must depict the person, it is always the idea that is caricatured. It is the realization of this that makes the caricature of the present day full of subtleness which escapes the particular notice of the careless observer but which produces the desired effect upon him.

For a better understanding of this, let us see why caricature is made. Most social and political evils exist only until their evil is made evident to the public apprehension. There are some errors of sentiment that can be better exposed by ridicule than by argument. The mission of caricature is to detect and expose such errors.

Caricature is generally to be found on the side of truth, for truth gives it all its force. A picture tells a story that can be read at a glance, and fixes upon the mind of the observer, impressions more decided and indelible than any other method that could be employed. It speaks in a language all can read.

Every great movement or idea has its representative in some individual. The idea or movement is characteristic of the man. This the caricaturist sees; he is a phrenologist, a physiognomist, and we may add, a physiologist. He knows the traits of character which have naturally made this man the exponent of an idea. The caricaturist in his work associates the man and the movement so that a caricature of the man always suggests the movement.

There are certain pursuits which stimulate and develop

certain passions that mark the features with unmistakable traits of character. Although the features may be cast in entirely different molds, the exercise of the same thoughts, aspirations, and passions, produce a general resemblance in the expression of men. Humanity is endowed with all the traits of the lower animals; and the closer the moral resemblance to a certain brute a man exhibits, the more his expression corresponds to that brute.

Those who have studied physiognomy are familiar with impressions made upon their minds by the features of individuals that suggest various animals. There are people who resemble the horse, some the dog, others various types, even birds and fishes.

The more apparent types are easily recognizable; even the least observing have been struck by the likeness which the thick-necked, square-jawed type of face presents to the pugnacious bull-dog, or the sharp-nosed, convex profile to the fox.

The hawk is the type commonly used by the caricaturist to present that type of humanity that preys upon its fellows.

The monkey represents the low, ignorant, and uncultivated; thus almost every animal can be enlisted in the service of the caricaturist.

Nor do these resemblances pertain only to the face, but to the figure and action as well. It is here that the true caricaturist exhibits his skill. He will always apprehend the correspondence between the face and the body, not only delineating the physiognomy to indicate the character, but with quick perception, divining the peculiar characteristics of the body, arms, legs, hands, and feet, which will best correspond to the face and augment its effect.

The caricaturist must know what each feature of his subject indicates, he must know what peculiar character should be endowed with a long neck and sloping shoulders, and when he should give force to his character by the bowed legs or in-turned toes. He should recognize the story of opulence or poverty, in the folds and wrinkles of the coat or trousers, as the general effect of all these details are recognized by the observer, although the process employed to produce the effect may not be understood.

There is always a reason why one man wears a hat pulled down over his ears like an extinguisher, and why another seems to balance his upon the very apex of his cranium. The hat tilted on one side is as much an unfailing indication of vanity, as the hat pushed down on the back of the head is of carelessness. So the collar, the gloves, the shoes, and all the details of costume,—each contributes to tell the story of character.

But, says the reader, this is all *character* not *caricature*! True, but to understand caricature it is absolutely necessary to apprehend character for they are inseparable; in a word caricature is the exaggeration of character.

Germany, France, and America produce the best caricatures. England, since the time of Cruikshank, has given us no real caricaturist, although Tenniel Leach, Du Maurier and others of *Punch*, have been rated as such. Still the fact

remains that they are all simply delineators of character; for a mere representation of extreme character does not reach caricature.

The French and Americans are to-day the best exponents of this art. The national character of the French, so susceptible to extremes in all things, renders them peculiarly fitted to enjoy the exaggerations of the caricature.

The American with his keen sense of humor, loves to laugh; not satisfied with the weak smile which a cartoon in *Punch* might provoke, he enjoys best the hearty laugh which is compelled by grotesque caricature.

It has been said that Americans love coarse wit rather than the refined and delicate treatment of which it is susceptible. This depends a great deal upon what coarse wit implies. If the phrase implies something lacking in decency, something of a low or vulgar treatment, it is not true; but, if it implies something which displays its purpose in a decided and unmistakable manner, a treatment that will instantly appeal to the sense of humor in a broad and simple way, then it is a fact. We Americans are a people pressed for time, and take our fun as we do our dinner, in short order. It is the business of the caricaturist to study up the subtle features of his work, and present them in a way so plain that the fine points may be discerned at a glance. For the average American will not lose too much time in trying to study out hints of humor which are only half revealed by the illustration.

Thomas Nast achieved a great and deserved reputation as a caricaturist, and had his skill as a draughtsman equaled his conceptions, he would have stood to this day no doubt at the head of the profession. He possessed the rare power of conceiving an absurd situation for his subjects and making the application to the political events, simple and apparent. He struck the vein of the American conception of humor. The events which he caricatured gave opportunities for successful caricature which seldom present themselves more than once in a life-time. The Tweed scandal, and the Greeley campaign were treated by Nast in a style he has never since equaled.

Since that time the practice and knowledge of art has taken such a great stride in America that the caricaturist has been obliged to look carefully to his drawing or be left behind; for poor and inartistic drawing is as great a defect in caricature as in any other branch of art.

Every caricaturist must be an artist, but all artists cannot hope to be caricaturists. According to what has already been written, caricature is an art requiring both natural aptitude and careful and intelligent supplementary training, and, without doubt, has its important use in the nature of things. It already yields a great influence in the social and political world; the politician fears its merciless ridicule; corruption fears its exposures. The endorsement of a political candidate by a comic paper is eagerly sought by his party, and the successful caricaturist can probably command the largest pay of any artist who devotes his talents to periodical work.

CLAIMANTS AT THE DOORS OF CONGRESS.

BY S. N. CLARK.

Washington is a vast store-house of claims; it is the Mecca of claimants, the harvest field of claim agents. In the limbo of Congressional inaction or departmental indifference, claims vague, shadowy or mythical, or hoary with age, jostle claims definite, new and well fortified by evidence; claims just and equitable consort with claims fictitious, exaggerated, and dishonest; all are huddled together—the latest comer and the oldest settler—and year by year the burden of Congress, unlike that of Sisyphus, steadily grows in weight and bulk, but like that, continually rolls back to the bottom of the hill. Their name is legion. Claims for Revolutionary services and supplies; claims for shoes and rum furnished to the heroes of Lundy's Lane and New Orleans; claims for forage and provisions and clothing for the soldiers of Grant and Sherman; claims of mail contractors; claims on account of Indian depredations; claims for bounties, pensions, and back pay; claims for services performed and horses lost; claims for taxes illegally assessed and collected; claims on account of foreign spoliations and domestic seizures—an infinite variety and an endless catalogue.

Claimants come and claimants go, but unsettled claims run on forever. Claims which have lain dormant since the year which gave birth to the nineteenth century, when uncovered to-day are as bright and sprightly as the toad newly liberated from the rock in which it has been entombed for a hundred years. In the files of Congress and the archives of the departments and the Court of Claims, to-day slumber hundreds of claims which are coeval with the foundation of the government and which await only the touch of the claim agent's wand to spring into activity at the behest of remote descendants of the original claimants. No statute of limitations runs against these demands.

Let us glance at some of these claims. Here is a memorial submitted to Congress in 1882 by Casimir Suffezynski, accompanied by evidence to show that he is a grandson of the Polish Count Pulaski who was killed during the siege of Savannah, in 1779, while fighting the battles of the Colonies against Great Britain. The memorialist sets forth that he and his family were sent to Siberia by the Russian Government in 1863, because of their devotion to liberty and were there imprisoned until released through the good offices of the American minister at St. Petersburg, when they emigrated to the United States for whose independence their ancestor had laid down his life. The grandson and granddaughter of this Revolutionary patriot now appeal to the generosity of the American Congress for pecuniary recognition on account of his services; and for several years the granddaughter has haunted the capitol during the sessions of Congress in the hope of securing favorable action. She may die and her children pass away, but the claim will remain, and some still more remote descendant of the gallant Pulaski may at last obtain recognition and reward in the second or third century of the history of the republic which he fought to establish.

Here are the papers in a claim by a Georgia farmer for certain food and provender furnished to the army of the United States in the first decade of this century. The original papers were filed by the farmer himself more than seventy years ago. He is dead; his children and grandchildren

sleep their last sleep, but the claim survives. When it was resurrected two or three years ago by a collateral descendant of the original claimant, it was as lively as on the day it was born. It amounts to only a few hundred dollars. Is it just? Who can tell? More than seventy years ago a committee of Congress, after investigating and considering it, decided that the claim was not established and thereupon submitted an adverse report, but that fact does not discourage the descendant of the Georgia farmer. He comes up smiling and asks the Forty-ninth Congress to reverse the action of its predecessor, taken more than seventy years ago when Henry Clay was speaker of the House of Representatives.

One of the pioneer steamboatmen on the Western rivers was Captain Henry M. Shreve of Pennsylvania, who built a steamboat at the boyhood home of James G. Blaine, and descended the Ohio and Mississippi rivers to New Orleans. Captain Shreve found the navigation of the Mississippi dangerous on account of "snags" and "sawyers," and his inventive genius was brought into play to devise means for their removal. He was successful, and in 1829 he built, under the direction of President Jackson's Secretary of War, the first "snag boat" that ever was operated. In 1838 Captain Shreve, being still in the service of the government, obtained letters patent on his invention, but seven years earlier he had petitioned Congress for "reasonable compensation" for the same. He asked a grant of twenty-five thousand acres of the land which might be reclaimed through the removal, by the use of his appliances, of the "Red River raft," which had formed an impassable barrier to navigation.

In 1834, a committee of the House of Representatives reported in favor of a grant of eighteen sections of land on the line of the "Red River raft" as a reward to Captain Shreve. A like report was made in 1836. Five years later Captain Shreve again petitioned Congress, this time for one hundred thousand dollars, to pay for the use of his invention. In 1842, 1843, and 1844, reports were made to the House of Representatives in favor of the payment of forty thousand dollars for the patent. In 1846 and 1848 reports were submitted recommending the payment of eighty-five thousand dollars. In February, 1855, the committee on claims reported that the claimant was entitled to not less than fifty thousand nor more than two hundred thousand dollars. In that year Captain Shreve died, worn out by age and disappointment. His snag boat had removed the great Red River raft, reclaiming hundreds of thousand of acres of land, opening up twelve hundred miles of river navigation and saving to the government annually eighty-five thousand dollars in the cost of transportation. His widow then appealed to the Court of Claims and her appeal was dismissed on the ground that Captain Shreve had made public use of his invention for seven years before he applied for a patent. The appeals to Congress were again renewed, and for a quarter of a century that body was importuned for justice by the widow, and at last, on January 13, 1881, President Hayes approved an act directing the payment of fifty thousand dollars to "the legal representatives of Henry M. Shreve, deceased." Probably a moiety of this sum had been expended by the claimant and his widow in the prosecution of this claim which Congress, after a delay

of nearly a half-century, acknowledged to be just.

Who has not heard of the McGarrahan claim? Who, in Washington, does not know the form and features of the claimant? He has been an *habitué* of the capital for a quarter of a century while Congress was sitting; every hotel lounger knows him and his history; he has besieged every president from Abraham Lincoln down to the present time; he has importuned secretary after secretary; he has appealed to committee after committee, and many reports for and against him have been the result; he and his claim have been in the lowest courts and in the highest court of the United States; the most eminent lawyers and statesmen have studied and argued it in Congress and the courts; more than once he has been on the very threshold of success—so near once, as his friends aver, that the patent for the great New Idria mine was signed and ready to be delivered to him—but he has never quite succeeded. Baffled but never discouraged, defeated but never cast down, William McGarrahan, the smooth-faced and well-fed, but still needy and seedy, Irishman, keeps up the fight and hopes to win some day. He is playing for an enormous stake. And if he should win! Why, McGarrahan is an old man even now, and he probably has mortgaged a half dozen—well, if the case ever should be decided in his favor the end would be like the result of the great case of Jarndyce and Jarndyce.

Almost any day one may see in certain Washington resorts, a man who for nearly thirty years was a claimant and who at last succeeded in wringing from a reluctant government the money for which he had been contending. This claim originated in 1814 when an American privateer was attacked by three British ships of war in the neutral harbor of Fayal, in the Portuguese dominions. The engagement was one of the most glorious in the annals of American seamanship and prowess. A little brig, carrying seven guns and ninety men, inflicted so much damage on a British squadron carrying one hundred thirty-six guns and about two thousand men, that the squadron, which was on its way to assist in the reduction of New Orleans, was delayed so long for repairs that the combined British forces did not appear before that city until after General Jackson had reached it and placed it in a posture of defense which enabled the Americans to repel the British assault. The little privateer was burned, but the plans of the enemy were thwarted and New Orleans was saved.

A prompt demand was made by the United States on Portugal for reparation for the loss and damage inflicted in one of her ports, all of which were neutral. For years the demand was pressed without success, and in 1850 the "Rough and Ready" President Taylor, through his Secretary of State, instructed the American minister at Lisbon to demand his passports and withdraw from Portugal, which he did. At that juncture President Taylor died, and the administration which succeeded consented that the claim should be submitted to arbitration, and Louis Napoleon was chosen as arbiter. This was done without the knowledge or consent of the claimants, and their interests were not represented by the American minister at Paris. Napoleon decided against the United States.

Before the claim was submitted to him the gallant captain of the privateer and most of his crew were dead. The captain's son, then in early manhood, took up the claim. He protested against its reference to arbitration, and in 1851, more than a third of a century ago, he came personally to Washington and began a work which ended only three years ago. In 1854 Congress referred the matter to the Court of Claims, which gave a favorable judgment and then reversed it. Again the claimant resorted to Congress. Once, the

bill for his relief passed the Senate after a hot debate in which Senators Slidell (who reported it), Seward, Clayton, Judah P. Benjamin; Cass, Houston, and others participated. The vote was twenty-eight to eleven. In the House, the bill fell on the last night of the session for lack of a quorum, although a large majority supported it. This bill carried an appropriation of seventy thousand seven hundred thirty-nine dollars, the exact sum which was awarded by Congress nearly a quarter of a century afterward.

A vast number of claims, amounting in the aggregate to some seven million dollars, which are now undergoing investigation by the Court of Claims, are known as the "French Spoliation Claims," because they arose from the spoliation by the French of American merchantmen. They date from the beginning of the century. For a time they were the subject of diplomatic correspondence and negotiation between the United States and France. Then they were dropped and for years they slumbered. The original claimants are dead, and most of their children have died and been buried, but the claims preserve all their original vitality. How many of them represent bankrupted fortunes and blasted hopes; how many are real and how many fictitious or exaggerated; how many just and how many dishonest? Who can tell?

More modern are the "Fourth-of-July Claims" which belong to the innumerable family of Civil War claims, and derive their name from the date of an act, passed in 1864, recognizing certain demands of citizens of the border states, on account of horses and other personal property taken by the Union forces during the war, for army uses. At every session of Congress an act is passed appropriating several hundred thousand dollars for the payment of "Fourth-of-July Claims" which have been investigated and approved by agents of the government. These claims are small, ranging from twenty to several hundred dollars each.

Other claims in multitudinous variety, arising from the war of the Rebellion, are those for services, pensions, bounty, and back pay. Pension and bounty claims which fall within the scope of the general laws are adjudicated and paid by the executive departments out of regular appropriations, as also are claims for the loss of horses and equipments in the military service. Beside such claims, however, there are thousands upon thousands which require legislative action.

At the close of the war a Wisconsin regiment was mustered out of the service in Kentucky. On its way home a railroad accident resulted in the death of several of the discharged soldiers. Of course the claims of their widows for pensions were equitable, but could be granted only by special acts of Congress. A woman who was a faithful and devoted nurse of the sick and wounded during the war, braving every danger to which the soldier himself was exposed, became disabled for life as the result of her services. She could receive no pension without Congressional approval. One such case I remember of a woman who lay for years on a bed of pain in Washington. She had become a cripple. After months and years of weary waiting for the relief which did not come, she had herself placed on a litter one day and carried to the Capitol where Congress was in session. Several of the men for whom she sent were "too busy" to see her, but her personal appeal was heard at last by General Garfield whose heart was as tender as his mind was great, and his efforts in her behalf were successful.

Another woman, aged and infirm, had a small claim, the payment of which depended on favorable action by Congress. The Senate repeatedly passed the bill, and it was as often killed by a single objection in the House. For several

years the claimant sat day after day in a gallery of the latter body, vainly waiting for the relief which never came. Some "economist" who knew nothing of the claimant's want or deserts was always ready to utter his "I object," whenever an attempt was made to consider the bill. At last, one day, Garfield, whose sympathies had been enlisted, saw his opportunity, seized it, and the bill was passed in a twinkling. Glancing toward the gallery he saw the claimant in her accustomed seat, knitting as usual, and evidently unconscious of what had taken place. He sent a messenger with the good news and when she heard it she dropped her knitting and raised her hands as if in thanksgiving, and then fell backward in a swoon. She was carried to a committee room and efforts made to restore her to consciousness, but in vain. The fruition of hopes so long and cruelly deferred had been too much for her frail body. She had entered into the only rest which hundreds of unsuccessful claimants ever find.

"Hope springs eternal" in the claimant's breast.

To one who has for years observed the vicissitudes of Washington claimants, the heart-breaking delays and rude rebuffs which they encounter, the hopeless and ignorant appeals that they make, few things are sadder than the hopeful, not to say confident air with which the claimant begins his quest. To him the day on which his petition is offered and consigned to the bursting files of some overworked committee is a red-letter day; to read in big government print the bill for his relief is to him for many weeks a pleasure without alloy; and if, perchance, he be the one fortunate man among five hundred, and his bill is favorably reported and placed at the foot of an overloaded calendar, his cup of joy runs over.

If such a man would read Mark Twain's story of "The man who put up at Gadsby's," it might do him good, even if it should moderate his expectations. This man, it may be remembered, came to Washington in a coach and four and drove up to Gadsby's; had not time to stop for dinner; had only come to collect a little claim and intended to leave for Tennessee again that night; returned to the inn late at night; would get his money early in the morning and be off for Tennessee. That was in 1834. In April, 1837, he sold his last horse and said: "So-to-morrow I'll be up bright and early, make my little old collection, and mosey off to Tennessee on my own hind legs, with a rousing good-bye to Gadsby's." "Well," said Riley, "that was thirty years ago. I'm great friends with that old patriarch. He comes every evening to tell me good-bye. I saw him an hour ago, —he's off for Tennessee early to-morrow morning, as usual; said he calculated to get his claim through and be off before

night owls like me have turned out of bed."

It is hardly a wonder that Charles Sumner, after an eloquent but fruitless appeal to the Senate in behalf of certain just demands, should have exclaimed, "I do believe that this is the meanest and most dishonest government on earth." I put by the side of this, a remark of General Bragg, of Wisconsin, long a member of the House Committee on War Claims, and well-known as the implacable foe of unjust claims and dishonest claimants. He said to me, "I can conceive of no condition in life more intolerable than to be poor and the possessor of an honest claim against the United States." Mark, that both these men were speaking of honest claimants and just claims.

It is unfortunately true that a large majority of the claims against the government with which Congress and the courts and departments are called upon to deal, are unjust or fraudulent. It is a fact, too, that multitudes of them have been subjected to a process of inflation, either because the claimant, knowing that the government does not pay interest, determines to make himself whole on that score, or because he listens to the arguments and obeys the suggestion of a claim agent working for a contingent fee, who assures him that claims are seldom or never allowed for the full amount, and that his claim must be doubled or trebled if he would obtain what is justly his due. Moreover, there are a good many claims that are purely fictitious, built upon a mass of false, *ex parte* testimony which it is impracticable if not impossible for Congress to sift, and weigh, and expose.

The possessors of fictitious and fraudulent claims often are men who live thereby, after a fashion, and few of them expect ever to get their hands into the public treasury. "What is Mr. So and So's business?" "Oh, he has got a big claim against the government. He is a little down at the heel now, but he will be rich when his claim is allowed." Certainly, and in the meantime Mr. So and So derives a more or less precarious subsistence from his "claim." To him it means winter clothing and summer garments, food and lodging, and intermittent supplies of pocket money. Is it a wonder, after all, that Congress has become discouraged and indifferent, that courts are suspicious or that honest department officials, after a while, come to regard every claim as fraudulent and every claimant a scoundrel? Can anything be done to sift out the unjust and fraudulent claims, to separate the sheep from the goats and remove the reproach which now rests upon the government on account of its tardy justice, or denial of all justice, toward men who have equitable claims against it? If so, what remedy can be applied?

GOVERNMENT SECRET SERVICE.

BY BEN: PERLEY POORE.

Secret service is an ancient institution. From the day when Moses sent twelve men into the land of Canaan to investigate and report on the condition of things there, every government has employed men on secret service abroad or at home.

Charles the First sent Randolph to America to report on the condition of the colonies, where an independent disposition was then beginning to manifest itself. Louis the Sixteenth, of France, sent the Baron de Kalb to investigate the revolutionary spirit that preceded the Declaration of Independence, and upon his report gave the aid which enabled the revolted colonies to triumph.

During the war, while those accomplished young officers, Nathan Hale of the Continental, and Major André of the Royal army, were detected, and met an ignominious death, it is well-known that General Washington had secret service agents in the British camp, from whom he received constant information from Lord Howe's head-quarters. Major Ben. Tallmadge, that dashing young Continental dragoon, was the agent through which the information was received. At first it was written with a sympathetic ink, obtained from France by Lafayette, which was only visible when the sheet of paper on which the letter had been written, was washed with another fluid. The invisible ink once made visible by

the application of the chemical re-agent which developed it, the manuscript remained as legible as if written with ordinary writing ink.

Washington's shrewdness, however, led him to believe that the British might possess this same sympathetic ink or something similar to it, and he wrote to Major Tallmadge that the secret service agent "should avoid making use of the stain upon a blank sheet of paper (which, he said, is the usual way of its coming to me). This circumstance alone is sufficient to raise suspicion. A much better way is to write a letter in the Tory style, with some mixture of family matters, and between the lines and on the remaining part of the sheet communicate with the stain the intended intelligence. Such a letter would pass through the hands of the enemy unsuspected, and even if the agents should be unfaithful or negligent, no discovery would be made to his prejudice, as these people are not to know that there is concealed writing in the letter, and the intelligent part of it would be an evidence in his favor."

Another prominent member of General Washington's secret service, was James Rivington, the editor and printer of the *New York Gazette*. When, in 1781, he saw that the British could not succeed in conquering America, he made a peace-offering to the revolutionists, by furnishing their commander-in-chief with important information. This he wrote on thin paper, and bound it into the cover of spelling books which he managed to have conveyed to Washington by men ignorant of the nature of their service. While thus aiding the Whigs, he unceasingly abused them in his newspaper, and retained the confidence of the Tory leaders and the officers of the Royal army. When the British evacuated New York, in the autumn of 1783, Rivington remained, while other Tories, less obnoxious, were driven away, and their estates confiscated. The explanation of this was his connection with the secret service.

Major Tallmadge wrote that their secret service agent was "a gentleman of business, of education, and of honor." This meant that he was engaged in some commercial pursuit, and that his social rank was such as to enable him to mingle with the British officers and the wealthy Tory families. He was kept well supplied with money, and there are fully a dozen references of sums ranging from fifty to a hundred golden guineas being forwarded to him.

Soon after the establishment of the government of the United States, Congress made an annual appropriation of thirty thousand dollars, which has been continued until the present time, for secret service abroad, which is drawn from the treasury by direction of the President, in such sums as he may need, without any voucher excepting the certificate of the Secretary of State stating the fact.

In 1812, President Madison communicated to Congress the commission and correspondence of John Henry, a British agent, proving that while the two countries were still at peace, "a secret agent of the British government was employed in certain states in fomenting disaffection to the constituted authorities of the nation, and in intrigues with the disaffected for the purpose of bringing about resistance to the laws, and eventually, in concert with a British force, of destroying the Union, and forming the eastern part thereof into a political connexion with Great Britain." This exposition, as may well be conceived, produced a great excitement, in and out of Congress. No one believed the persons in New England, with whom Henry held communication, had any thought of "secession" from the Union, though some of their public writers had made violent obtestations of what they would do. Yet, from a feeling that this disclosure reflected upon them in some degree, some of the old Federal

party in Congress resented it, while others affected to ridicule the whole matter; upon which demonstration of feeling Mr. Widgery, from down East, quoted against those who made them, the old saying among gunners, that "you may know the wounded pigeons by their fluttering."

In the Mexican war, large sums were expended for secret service, and in March, 1849, there was an appropriation of fifty thousand dollars for this purpose, which was expended under the direction of the President. After the Mexican war, "hire of interpreters, spies, and guides for the army," was included among the incidental expenses of the quartermaster's department, for which an appropriation has since been annually made by Congress.

When the war for the suppression of the Rebellion broke out, large sums were necessarily expended by the officers of the regular army and of volunteers for secret service. Among other items of a suspended account of Gen. Butler's was the payment of fifty dollars for a hand-organ and a monkey. This was disallowed by the vigilant officers of the Treasury Department until it was explained to them that they were purchased at Annapolis, to enable a gallant young officer, familiar with the Italian language, to go through the enemy's country to Washington, disguised as an organ-grinder, and notify the President of the great northern uprising, and of the approach of Union troops for the rescue of the capital.

The detectives began to flourish at this most trying period of our national history. Arbitrary arrests, imprisonment without trial, and punishments without hearing, were frequent, and it was notorious that many of those who brought Confederate news from Richmond, carried Union news back there.

Many of those in the secret service were convicts escaping punishment and criminals escaping conviction, and in many instances our government suffered more from them than from the arms of the Confederates. Prominent merchants, such as William E. Dodge of New York, Franklin W. Smith and M. Williams of Boston, with others, scattered all over the country, were accused with defrauding the government; their books and papers were seized, and they paid large sums to avoid arbitrary arrest and imprisonment, as did others connected with firms still in existence. Senator Sumner, in a letter to the President, remonstrating against the manner in which Franklin W. Smith, his friend and constituent, had been treated, said:

"It is hard that citizens enjoying a good name, who had the misfortune to come into business relations with the government, should be exposed to such a spirit; that they should be dragged from their homes and hurried to a military prison; that they should be obliged to undergo a protracted trial by court-martial, damaging their good name, destroying their peace, breaking up their business, and subjecting them to untold expense, when at the slightest touch the whole case vanishes into thin air, leaving behind nothing but the incomprehensible spirit in which it had its origin."

While these men were enriching themselves at the North, others in the secret service of the army were performing a good work by obtaining information from the Confederate capital. Prominent among them was Col. J. F. Jaquess, of the Seventy-ninth Illinois volunteers, who went through the lines at the request of Mr. Lincoln, who pronounced his services of "great value to the country." The Confederate secret service, however, was far more efficient than that of the Union, and the reason, perhaps, was that in it were scores of intelligent ladies, who managed to obtain at Washington and elsewhere at the North, correct information of the

intentions of the Union generals. This was notably the case prior to the battle of Bull Run, when the advance of the Federal troops, with the strength of the regiments composing it, was obtained by Mrs. Rose Greenhow, from a New England senator, and placed in the possession of General Beauregard. In return she received this dispatch from the Confederate Adjutant-general: "Our President and our General direct me to thank you. We rely upon you for further information. The Confederacy owes you a debt."

The daring acts of Mrs. Greenhow, and other ladies of wealth and fashion at Washington, who were in the secret service of the Rebellion, form a curious chapter in the history of the war. The intriguing nature of these dames appears to have found especial delight and scope in aiding the movement to overthrow the Washington government. It mattered not that many of them owed the most they possessed of fortune and position to the Federal government, which had fallen into the hands of men, who, with all the lofty scorn of "patrician" blood, they despised and detested.

It became necessary to organize a special detective system of espionage at Washington for the protection of the government against this throng of mingled beauty, accomplishments, and disloyalty. They watched and waited at official doors until they had bagged the official secret of state they wanted; they stole military maps and plans from the War Department, and from the table of General Scott; they smuggled the information which they obtained, in the linings of honest-looking coats, and they hid army secrets in the mysteries of innocent-looking bustles; they burned signal lights from garret windows, and they crossed the Potomac below Alexandria, at dead of night, and with muffled oars. At one time the government had caught and "hived" over a dozen of these busy Confederate bees in a house at Washington, where in a few days, they beguiled the young officers charged with guarding them, and carried on their vocations as before.

Belle Boyd, whose father held a place under the Federal government at Washington before the war, became noted early in the conflict as a female spy. She was a sharp-featured, black-eyed woman of twenty-five, with a Die Vernon dash of manner, a quickness of retort and an utter abandon of manner and bearing which often carried her over the boundary of modesty. She wore a revolver in her belt, rode a spirited horse, and easily ingratiated herself into the attentions of young Union officers, from whom she would extract valuable military information. She also had in the Valley of Virginia a sisterhood of coadjutors, who reported to her frequently, ladies who had the good sense not to make themselves so conspicuous as she was, and whose services were unknown, except to her, and were, therefore, effective.

Many anecdotes were related about the manner in which the Confederate secret service men obtained reliable information from the departments. The hero of one was a bustling son of Merry England, who was a member of a Washington firm of stationers which had profitable contracts for supplying the departments. Visiting New York on business, he stopped at the Brevoort House, where another guest made his acquaintance, and they went to the theater together for several successive nights. When the Briton was about to return to Washington, his new friend asked him if he was acquainted at the departments. "I acquainted at the departments!" confidently replied the Briton, "why I know every man in them, from the secretaries down to the messengers. If you ever want anything done there, command my services."

The Briton went back to his business, and in a fortnight or so received a letter from his New York friend, reminding

him of his promise, and asking him to ascertain, if possible, the truth of a report that the blockaded port of Galveston was to be opened. Off trudged the Briton to the State Department, where he by chance asked the question of the very clerk who happened to know, and who innocently furnished the desired information. Returning to his store, he at once wrote this to his friend, and also again volunteered to obtain any other information that might be wanted from the Department of State, or elsewhere.

A few days afterward, while eating a quiet family dinner, the Briton was astonished by the appearance of an orderly, who summoned him to appear without delay at the War Department. On arriving there his surprise was increased at being shown a telegraphic order from Major-General Dix, commanding the Union troops at New York, directing that the Briton be arrested at once and sent in close custody to Fort Lafayette.

Luckily one of the assistant secretaries of war, Mr. Watson, was a countryman and a friend of the astounded Briton, and he telegraphed a request for the cause of the arrest. The reply was that a noted blockade runner had been arrested at New York, and that in his pocket was found a letter from the Briton, not only giving contraband information obtained at the State Department, but offering to supply more. Mr. Watson at once comprehended the situation, and after some telegraphing obtained the Briton's release, although Secretary Seward suspended a profitable contract under which his firm supplied the Department of State with stationery.

When the war was ended, the Union and some of the Confederate detectives drifted to Washington, where many of them were enlisted into the War Department secret service corps, commanded by Lafayette C. Baker. He was endowed with a full measure of cunning, trickery, and was ever anxious to impress the public with the value of his services to the great war secretary. When the break occurred between President Johnson and the Republican party, Baker endeavored to prove, with the aid of some of the male and female members of his force, that a Mrs. Cobb had procured pardons for ex-Confederates for money. At the same time Baker was employing men to prevent the deposition of Johnson, and the elevation of Wade to the presidential chair, which would have headed off Chief Justice Chase.

The money used in the impeachment trial was contributed by the distillers, and the secret service of the Treasury Department conceived and organized the "whiskey-ring," formed of government officials and producers. The whiskey-taxes were divided, and about one-half was paid into the treasury while the "ring" divided what remained. When the distillers slackened in their production, the officials urged them to greater activity. The result was that, although the "ring" embraced about every revenue official at the West, several politicians, and sundry people in Washington, the fraudulent gains amounted to millions, and for years some of the thieves pocketed four or five hundred dollars a week as their share. General Babcock, one of General Grant's personal staff, who was regarded as a member of the "ring" was subsequently tried at St. Louis and acquitted, although public opinion always uncharitably regarded him as guilty, and intimated that President Grant's influence had indirectly secured the verdict of acquittal.

During the administration of General Grant, the secret service flourished at Washington, with the lavish expenditures for paving the streets and renovating the city, inaugurated by Governor Shepherd. Among its other operations was the execution of a plot concocted by General Babcock and District Attorney Harrington to blacken the reputation

of Mr. Columbus Alexander, who had made himself obnoxious to the "ring." A detective informed Mr. Alexander that he would obtain and deliver to him the private account-book of a contractor that would show the entire rascality going on.

These books were delivered by the contractor to District Attorney Harrington, who locked them up in his safe. The next night two professional burglars were hired to enter the office, blow open the safe, and carry the books to Mr. Alexander's house. That day Harrington informed the police that he feared a burglary was about to be attempted, and the superintendent and the whole detective force were on hand at the appointed hour. When the burglars had performed their work they walked boldly out at the front door of the District Attorney's office, where they were kindly received by Harrington and his friend, A. B. Williams. The principal burglar having earned his fee, bade his confederates good-night and walked home.

His assistant, in pursuance of the agreement, started for Mr. Alexander's house, followed by the detectives and representatives of the "ring." He lost his way unfortunately, and Williams was obliged to direct him. He rang the bell for fifteen or twenty minutes, but failed to arouse anybody. He was then arrested by the detectives and locked up. He subsequently signed an affidavit, at the instigation of Harrington, setting forth that he had been hired by Mr. Alexander to blow open the safe in the District Attorney's office, and bring Evans' books to his house.

The affair was immediately investigated. Harrington and the secret service officials involved themselves in an inextricable mass of perjury, and then the detective first employed by Harrington came forward and revealed the whole conspiracy. The feeling against the scoundrels who had thus plotted to ruin the character of an upright and honorable man was very bitter. The masks were torn from their faces and they stood revealed in their true colors. The few honest men who had been deceived by their pretenses into defending their acts repudiated them utterly.

The exposure of the wrong doings of the secret service led to the refusal of Congress to make any appropriations for its pay, with the exception of a small force attached to the Treasury Department. The old capitol prison was converted into dwelling-houses, and nearly all the detectives were scattered over the country, many of them becoming connected with private secret service organizations. As a general rule, these fellows are inferior in intellect and ability, if not in honesty, to the professional rascals whom they occasionally arrest. They often lay traps for weak men in crimes designed for them, and find vulgar employment by those seeking divorce from matrimonial bonds. Secret service is certainly not a necessity in a republic in times of peace, and when their virtues and their weakness during the war for the suppression of the Rebellion are impartially summed up, it will be difficult to decide whether those who professedly served the Union were a blessing or a curse to it.

AMONG INSECTS.

BY MARY TREAT.

ORDER FIRST: ANTS, WASPS, ICHNEUMON-FLIES, ETC.

Insects exist in four different stages: First, the egg, second, the larva, third, the pupa or chrysalis, and fourth, the imago or perfect insect.

The larva is the growing state of the insect, in which it feeds voraciously, only ceasing from eating long enough to moult or through off its skin from time to time until its full size is attained.

When the larva has become fully grown, it passes into the pupa (the name for an infant rolled up in bandages after the manner of the ancient Romans); this state is also called chrysalis, from the Greek word for gold, as some have gold-like markings in the shape of bands, dots, or points scattered over the surface of the chrysalis case.

Most insects in this state appear to be dead, while a few, as will be noticed further on, remain active. Some appear as if swathed in a hard mummy-like case, others make a cocoon of silken threads, like the silk-worm, in which to assume this form; while others make a hollow chamber in the earth for the same purpose; and a number draw leaves together to make a covering to hide them while in the pupa state. The insect may remain in this stage for a few days or weeks, or it may pass the winter in this dormant condition.

The method by which it escapes from its self-imposed imprisonment, at the proper time, is strange and interesting—as in the case of some of the moths and butterflies, when they come forth and spread and dry their wings; it seems wonderful that they could have been packed in so small a space.

As in kindred sciences, insects are placed in orders, according to their general resemblances. Most authors ar-

range the various insects into seven orders, each of which is subdivided into families and genera. The first and highest order is the HYMENOPTERA, which includes ants, bees, wasps, ichneumon-flies, gall-flies, etc. The insects of this order are mostly useful to man, and might well be called guards over the rest of the insect world, as they serve to keep injurious insects greatly in check, either by feeding directly upon them, or storing them up for their young. This order also ranks the highest in intelligence, and many of the insects placed here, possess wonderful architectural skill. Some of the families provide the young with nurses who feed and tend them with the greatest care and apparent affection.

This is especially true of the ants which have attracted the attention of mankind in all ages, and yet there is much to learn concerning the various species throughout the world; and less is known regarding the ants of our own country than of those in any other part of the civilized world.

For several years past, I have devoted much time to these intelligent creatures; patient daily study, week after week, noting their habits and trying to learn their life-histories. And very little I know to-day—but enough to fairly overwhelm me with wonder and admiration.

Of the various species which have claimed my particular attention, I would place the slave-making ants, of which we have two widely dissimilar species in the Northern States, and the agricultural or harvesting ants, at the head of the list for intelligence and skill in various directions.

The harvesting ants are so called from the fact that they gather seeds and grain and store them in under-ground chambers or granaries. We have three small species in the Northern States that gather and store seeds; and very inter-

esting, curious creatures they are. But the harvesting ants (*Pogono-myrmex crudelis*), of the Southern States are much larger than our northern species, and consequently seem more attractive and more easily observed.

My observations on the southern species were mostly confined to Florida, where I found numerous colonies in the low pine-barrens. The communities of these harvesting ants are not as large as our slave-making colonies, and colonies of our mound-building ants far exceed them in the number of inhabitants. This is probably owing to the fact that like the hive bees there is but one queen in each colony of the harvesters, while with other species there are many queens, or, more properly speaking, mothers—as but one true queen can exist in a colony. These harvesting ants also resemble our honey bees in having a barbed sting, which is torn from their bodies and left in the enemy they punish. Although it is sure death to the plucky little creatures who thus use their stings, yet they unhesitatingly sacrifice their lives for the good of the community.

The colony is composed of, first, a queen, second, large-headed soldiers or amazons, about the size of the queen, but with much larger heads, third, large or major workers, and fourth, the small or minor workers which resemble the major workers, except in their smaller size, and these far exceed all the rest in numbers, and are the purveyors or harvesters that gather and store the grain. At certain times of the year, just before swarming, the males are also found in the community, but as they take no part in the industries, or defense of the colony they are treated the same as the drones among our hive bees; driven away or killed by the diligent workers, who will allow no useless hanger-on in their commonwealth of toil.

This harvesting ant is the only species to my knowledge where but one queen-mother exists in a colony, and if deprived of its queen, confusion and anarchy reign among the inhabitants. This I verified by repeated experiments. I always found the queen in a roomy cell or chamber, surrounded by several large-headed soldiers.

The nature of the soil in the low pine-barrens made it possible, with care, to cut into the nest, or formicary, without greatly disarranging it, and I soon learned how to follow the grand or main entrance to the queen's apartments. Surrounding this apartment, and connecting with it by galleries, were other large rooms occupied by the amazon soldiers, or, perhaps, maids of honor, as they did not act very much like fighting soldiers when their queen was taken from them, but on the contrary they seemed paralyzed with fear, and made little or no attempt to defend their queen. Possibly this was such an unlooked for assault that they did not know how to resist it. But the plucky minor workers clung to my gloves with jaws and stings, neither of which could reach my hand through the thick leather which it was necessary to wear to escape being stung.

On the following day I visited a colony which I had deprived of its queen, and now saw several groups of small workers, each in a compact mass, surrounding a soldier. It looked as if the entire community had come out of the formicary and were holding the amazons responsible for the loss of their queen. Here a group was dragging one by the antennae, while the poor creature was lying on its back, with legs drawn close to the body, and not offering the least resistance to the indignities that were heaped upon her. Another group was acting quite differently; they had not yet progressed so far in their proceedings with the prisoner, for prisoners all these large amazons certainly were; first one and then another of the little workers would reach up and touch her antennae as if questioning her. Sometimes one would re-

peat the operation several times, to which the soldier would always respond by bending down her antennae, as her great head towered above her questioners.

The group that was dragging the soldier, soon executed her by severing the body at the waist, or pedicel, where the thorax is joined to the abdomen. The executioner was a minor worker who fastened its jaws, or mandibles, to the culprit, never letting go its hold until the body separated. This group then dispersed, left their victim and went to other gatherings, and if they could find no opening around the prisoner, they mounted upon the backs of their fellows so as to be within reaching distance, or to learn all that was going on at the trial. Why the prisoner did not try to defend herself against her persecutors was a mystery I could not fathom. With her superior size and strength, and powerful head and mandibles, she could have crushed any number of her small assailants.

The head and thorax of the severed victim walked around with distended jaws, but now no attention was paid to it, and it soon wandered off in the grass and was lost to sight. Whether all the soldiers met the same fate, I did not learn, as the proceedings were slow, continuing four or five days. At the end of this time all of the soldiers had disappeared, and the minor workers were busily engaged in repairing the damages to their formicary. But this did not argue that the amazons were all killed, as they are very seldom seen outside of the home except in time of battle or some other emergency.

If a colony of honey bees lose their queen, an undevolved female or worker is sometimes exalted to this state and has been known to perform virtually the office by laying eggs, and has been fed and attended by a retinue the same as a queen. So possibly the behavior I witnessed among these ants may have another solution, and instead of holding the amazons responsible for the loss of the queen, they may have been trying to decide which one to elevate to this rank. But the fact that some were killed seems to lie in the way of this theory, unless like men in some oriental lands, they choose one for a ruler and slaughter all the rest who might become competitors for the throne!

I learned something of their proceedings and habits by making artificial formicaries, and placing them where I could watch them at my leisure. I took two glass candy jars, and filled each about half full of damp soil, well pressed down. Into these I put a good many small workers, and several large soldiers, and also added the half grown larva which I had found among them, for these little white, grub-like creatures—no way resembling the parent—would make them more contented in their new quarters. After they had become satisfied that there were no means of escape, the workers commenced mining, making galleries and underground rooms.

I surrounded the outside of the jars with thick paper, as high as the earth extended, in order to exclude the light, hoping they would make some of the rooms next to the glass.

The soldiers huddled together and did no work. There was no queen here, and I expected to see the same behavior manifested toward them that I witnessed at the colony on the pine-barrens. But I was disappointed. As soon as an apartment was made, which was in a few hours after the ants had been put in the jar, the amazons were led by the small workers, without resistance, to the rooms below. The little conductor would reach up and lay hold of her antenna, apparently with gentleness and kindness, and together they would descend out of sight.

After a few days, when the ants had become settled in

their new home I dropped two queens into one of the jars. One was the sovereign of the colony from which the ants had been taken, and the other was from an adjacent formicary. The paths or roads extending from these two colonies crossed each other, and here the inhabitants often met, exchanging greetings in a friendly manner and then passing on, each her own way. But the two queens in the jar instantly rushed upon each other, with extended mandibles, and were soon locked in a fierce embrace, tumbling, rolling like a ball; and great confusion reigned among the residents. The amazons came up with eagerness and haste and closed around the combatants—greatly excited, prancing about with open jaws, but in no way interfering with the fight. If the contestants in their struggles rolled too near one, she instantly backed off, but still seemed fascinated and anxious to see the result of the battle.

The small workers soon left the scene of conflict, and paid no further attention to it, but commenced mining and carrying out earth with a speed that I never before witnessed among them.

One of the queens soon lost a leg, but it caused no diminution of her courage, she held on to her adversary with a pertinacity that was truly astonishing. In about an hour the wounded queen was further mutilated, her antagonist cut off one of her antennæ, and this ended the struggle. The conqueror strutted about, waving her antennæ as if proclaiming the victory, while the other in a dejected manner wearily crawled to one side, where she was soon surrounded by the amazons, who seemed to sympathize with her. They stroked her with their antennæ, and licked and combed her, cleansing her from the dust which adhered to her body.

And now two or three of the little workers came up and touched her, and then immediately went below, but they soon returned, or others came, and one took hold of her remaining antenna, and gently led her, all mangled as she was, out of sight, and the amazons followed, leaving the victorious queen alone on the field. But after two or three hours had elapsed, the minor and major workers began to congregate around her and soon killed her. This time the executioner was a major worker, who severed the body in the same way that the minor did the amazon's on the barrens.

I could see no difference in the two queens, and could not tell which one belonged to the colony in the jar, but they no doubt recognized their own, and put the foreigner to death.

At first the artificial formicaries promised to be quite a success. On removing the papers I found several apartments next to the glass. The queen and two or three amazons were in one large chamber, but the unusual light frightened them and they hurried from sight. There were also two store-rooms next to the glass, well filled with seeds, millet, etc., which I had put into the jar. Another apartment seemed to be the dining-room, where soldiers and workers were feasting on a large caterpillar. It was the larva of *Papilio thoas*, which I had found eating the leaves of an orange tree, and so gave it to my pets to dispose of. I dropped it by the side of a head of millet, where several little workers were shelling out the seeds to store away. They instantly quitted their work, and some attacked the monster at once, while others hurried below and spread the news, when a throng of workers came hastening out to capture it. As soon as the creature realized the situation in which it was placed, it fairly galloped round the jar, knocking its persecutors right and left, who were trying to stop its progress. Some mounted on its back and heroically

gave up their lives by using their stings, but still there was no decrease in the speed of the victim. And now several of the pursuers seemed to abandon the chase and went below, but they soon returned followed by the amazons who speedily dragged the writhing captive from sight.

I must tell how the ants put a stop to my watching them through the glass. Each time that I removed the paper they seemed greatly excited and rushed away. After a few days they commenced plastering the glass with earth mixed with some kind of glutinous substance which made it adhere so firmly to the jars that it was difficult to scrape it off months afterward when I emptied them. This exclusion of light was a manifestation of ingenuity which in all probability they had never previously been called upon to exercise.

We have but to open our eyes to see the constant war that the hymenopterous insects wage against injurious ones. Even those most dreaded by us, are helping to diminish the numbers of the enemies of our gardens and fields. The white-faced hornet which often hangs its great paper nest in our orchards, and which everybody fears, is nevertheless destroying myriads of noxious insects. This past summer I was picking pears from a tree which was infested by that worst enemy of the pear and cherry trees—the "slug," (*Selandria cerasi*), when I noticed several hornets on the tree. Stepping back and keeping watch, I saw they were taking the slugs from the leaves. Sometimes one would get two or three, and holding them in its mandibles and fore legs, would fly to its nest on a neighboring tree, where it, no doubt, fed the unsavory things to the young hornets.

To this order also belong the ichneumon-flies, which compose one of the most important and largest groups in the insect world. They are all parasites. Some are quite large, while others are so small that they can scarcely be seen without the aid of a lens. But they all have similar habits, depositing their eggs in other insects. The larger species leave but one egg in each victim, while some of the smaller ones leave great numbers.

One of the most familiar examples may be found in the tomato-worm. Some years it is almost impossible to find a worm free from these internal parasites. The parent of these parasites is a tiny, black, microgaster fly, which goes peering about among the tomato vines until it finds a worm, when it lays a great many eggs all over its body. The eggs soon hatch, and the minute larvae work their way into the body of the worm. The worm eats voraciously, and grows as fast as if nothing was the matter. The little parasites grow too, and make the body of their host look plump and full, for they are packed thickly between the digestive organs and the skin, where they consume all of the fat, which would otherwise go to make the future moth.

When the little things are full-grown, and have finished eating, they gnaw their way out through the skin of their host, and now standing on end, they commence to spin their small cocoons all over its back and sides. The poor victim has rapidly shriveled and shrunk in size, its appetite is gone, and it soon dies. But it clings to the plant, and lives long enough for the small flies to come out of the cocoons, which is in about five days after they are spun. Each one pushes up a tiny cap or door on the top of its cocoon, and a very different looking creature comes forth from that which we saw wind itself in the cocoon. It is astonishing how quickly the transformation has been wrought, but here it stands on its empty cocoon, a small, bright, wide-awake, active fly, waving its antennæ, and making its toilet preparatory to launching out in the great world, where it soon repeats the work of its predecessor.

SUPERFLUOUS WOMEN.

BY MARY A. LIVERMORE.

To the arguments for woman's better industrial training, and to the movements in progress for its accomplishment, there is constantly interposed the objection that it will interfere with the marriage of women. Stated definitely, this is the objection: If women are trained to self-support, and are able to maintain themselves by their own labor, they will not marry, but will ignore their "fore-ordained work as wives, mothers, and nurses of children."

A writer in the *Popular Science Monthly* declares that "the present effort of woman to invade the higher forms of labor is battling with the established order of sexual relation." Dr. Nathan Allen of Massachusetts, in *The Journal of Psychological Medicine* tells us that "the Almighty has established bounds or limitations beyond which woman cannot go without defeating the primary object of her creation—and maternity is the primary law of her creation." And a writer in the *North American Review* complains that "girls are being prepared by superior education, to engage, not in child-bearing and house-work, but in clerkships, telegraphy, newspaper writing, school-teaching, etc. And they are learning to believe, that if they have their 'rights,' they will yet be enabled to compete with men at the bar, in the pulpit, the senate, the bench." "There is a growing, widespread neglect, indifference, or opposition to marriage, on the part of modern women," continues this writer, "and they refuse to marry, because they are now able to support themselves."

It is true, there are communities in the Eastern part of our country where women are in excess of men. In Massachusetts, women outnumber men by seventy thousand. And the statement is made authoritatively, that in the Eastern and Middle States of the Union, there are nearly half a million more women than men. The most enterprising, energetic, and eligible of the young men of these sections have emigrated West in such numbers, as to cause this excess of women. No theory, therefore, is necessary to account for the non-marriage of tens of thousands of Eastern women. The facts explain it. And these very facts form an imperative reason why "superior education," and "higher forms of labor" should be open to women, for a large minority are to be self-dependent and self-supporting.

It is also true that large numbers of the better class of women, the more cultured, thoughtful, and refined, demand more in marriage than was formerly thought essential. Not more in the way of worship, luxury or indolence. But their ideal of marriage has grown so high as not to be easily attainable, in the present condition of things, while they regard parentage a sin, when not conditioned on the noblest qualities of manhood and womanhood. "The average man is often rough, ignorant, greedy, and sensual," says the writer in the *North American Review*, to whom I have before alluded. "His coarser pleasures and wants consume his earnings. His tastes are vitiated, and the dull serenity of home-life, too often seems undesirable." If this pen-portrait seems a caricature or a libel, let it be remembered that it was drawn by a man, and not by a woman. If it be correct, then "the average man" is unfit for husbandhood, and fatherhood. No woman has a moral right to become the mother of children whose father is drunken and immoral. For this perpetuates the brutishness and woe of the race,

and extends evils that should be eliminated from humanity. Some of the noblest women remain outside of married life to-day, because their theory of marriage is too excellent for them to realize in their circle of society.

The overwhelming majority of women in America, however, become wives and mothers—it is only the minority of a minority who remain unmarried. As the country grows older, it will undoubtedly be otherwise. For the same causes will produce here, as they have in Europe, a great host of women, whom the sociologists of the day denominate "superfluous," because they are in excess of men, numerically, and, therefore, cannot marry. While there are born into the world, on an average, taking one year with another, one hundred six boys to every one hundred girls, there is not a nation of Europe, in which women do not outnumber men.

In England and Wales forty-three out of every hundred women cannot marry, because there are not men enough to furnish them with husbands. In Prussia, there are one million and a half of unmarried women. In Baden, thirty-five per cent of women earn their own living. In his work on "Brittany," Mr. Bloomfield tells us that "it is poverty, and not religion, that fills the convents of that country." The same is true of Italy, where it is confessed that one great use of convents is to provide for "superfluous daughters." Professor von Scheel, of the University of Berne, Switzerland, in a rectorial address, presented these facts as a reason "why every sphere of activity possible should be opened to women." He attributes the decline of marriage in Europe to the fact that "a woman is less able than formerly to help her husband on account of the extent to which corporate manufacture has superseded domestic industry." And he urges that women shall be admitted to every profession or trade for which they prove themselves qualified.

What causes underlie this great surplus of women in Europe? War has always depleted the ranks of manly men, most frightfully. "The whole history of the world," says Niebuhr, "turns on war and conquest." Edmund Burke made a careful estimate of the number of men destroyed by war, from the beginning of authentic history up to his own time, and found it to be *thirty-five thousand millions*. The peace of Europe, to-day, is maintained by five or six millions of men, trained to war, and kept in camp, under drill, and in constant readiness for action. They are withdrawn from all productive industries, and largely from domestic life. Their places are taken by women, who are thrust into employments unsuited to them, and thrust out of domestic life. They become de-womanized, and almost de-humanized, and suffer the loss of the finest qualities of humanity. The aggregated war-debt of Europe is over twenty thousand million dollars and the annual interest on this war debt is almost a thousand million more. Poverty, decline of marriage, and the deterioration of both manhood and womanhood, follow inevitably.

"The sword hath slain its millions, but strong drink its tens of millions," is the well-known adage. It is not possible to give the statistics of death among men, occasioned by intemperance, but they undoubtedly largely exceed those of war. For while there are periods when nations are exempt from the ravages of the sword, those caused by drunk-

enness continue through times of war and times of peace. The New World is by no means ignorant of the destructive potency of strong drink. It is estimated that from sixty to one hundred thousand persons, chiefly young men, die annually in America from the effects of alcoholic stimulants. Life insurance experts tell us that the mortality of liquor-users is *five hundred per cent greater* than that of temperate persons. The expectancy of life for a temperate person at the age of twenty years is forty-four years; that of an intemperate person at the same age only fifteen years. Any use of intoxicating liquors, therefore, tends to shorten life. And as probably half the men of America are addicted to the moderate, or immoderate use of strong drink, is it surprising that so many of them go down to premature graves, leaving young widows and children to self-support or charity? The ranks of the marriageable men are still further depleted by the inevitable fatalities attending the pursuits of men in pleasure and business, by overwork, and excessive haste to be rich.

It is not safe, therefore, neither is it wise nor kind, to rear our daughters as if marriage were their only legitimate business. For, although Dr. Maudsley tells us that "the woman who misses marriage misses everything," all who have reached adult life know that hosts of women *in marriage*, "miss everything." For many men make neither good, nor competent husbands. Some become permanent invalids, others are dissolute, and unambitious, and not a few desert entirely both wives and children. Many married women find themselves compelled to assist in earning the living of the family, while performing all the labor of the home. Many wives earn the entire livelihood of the whole household. Many women are widows, with children, aged parents, and invalid kindred dependent on them, while an increasingly large number in the older states of the Union do not marry at all. If untrained in remunerative industry, lacking in practical knowledge, and ignorant of the simplest forms of business, they inevitably suffer great hardships.

It is, therefore, of primary importance that the education of every young woman shall include a thorough, practical knowledge of a trade, a paying business, or a profession, so that self-support may be possible to her. Then, married or single, life will be easier to her. It will make her the more desirable wife and companion, the wiser mother, the self-poised woman. It will strip the future of the vague terror with which aimless, untrained women regard it, and will assist in the cultivation of that habit of seeing the brightest side of things, which Dr. Johnson has pronounced "worth a thousand pounds a year."

We are accustomed to regard the increasing excess of unmarried women as a peculiarity of modern life. But even a superficial knowledge of history is sufficient to reveal the fact that it has been a characteristic of older times, and of other civilizations. It is doubtful if there is a larger number of unmarried women in England, to-day, where the excess is greatest, than there was in feudal England, taking into account the populations of both ages. The celibate women of old England resigned themselves uncomplainingly to whatever fate befell them, and endured submissively any treatment meted out to them. But the unmarried woman of the present asserts herself, and with a nobler conception of existence, demands justice, and activities that may conduce to her happiness and usefulness.

The Roman Catholic church has always emphasized the holiness of a celibate life. By the end of the third century, monasteries and convents had spread through the Eastern church with amazing rapidity. For nearly sixteen hundred years, religious orders of celibate woman have existed, and as Sisters of Mercy or Charity, have invaded every depart-

ment of the world's work, woe, and sin. Open alike to rich and poor, they have assuaged the sufferings of millions. They have diminished, in places, the vast total of human wretchedness, and have developed some of the very noblest types of womanhood. In the rough, wild, lawless days of semi-barbaric times, and mediæval ages, they were a benefaction, and prevented more misery than they ever inflicted.

During the pontificate of Pius IX., a census of the monastic and conventional institutions of the world was taken. There were then ninety-four religious orders and congregations of women, with nine thousand, two hundred forty-seven convents, to which were attached a little more than one hundred thousand nuns.

But neither the celibate life, nor the conventional system originated with the Roman Catholic church. "In the midst of the sensuality of ancient Greece," says Lecky, "chastity was the pre-eminent attribute of sanctity ascribed to Athene and Artemis. . . . The Parthenon, or virgins' temple, was the noblest religious edifice of Athens. Celibacy was an essential condition of several orders of priestesses. . . . The whole school of Pythagoras made chastity one of its leading virtues, and even labored for the creation of a monastic system. . . . Strabo mentions the existence in Thrace of societies of men and women aspiring to perfection by celibacy."

Undoubtedly, the vestal virgins of Rome, to whom intense sanctity was attributed because of their celibacy, furnished the hint to the Catholic church for the foundation of convents, and the consecration of nuns. While the augurs and pontifices, old fraternities of pagan priests, who lived apart from the world, and served in the temple of the deity whom they honored, gave the suggestion for the various orders of the Catholic priests. The begging friars, whom one meets everywhere in Italy, correspond to the orders of mendicant priests of ancient, heathen Rome, who went from house to house with a sack, begging for their fraternities.

But neither Greece nor Rome originated the conventional system, with its priests and priestesses. The human mind repeats its experience, age after age. We go to the histories of India and Egypt, and find the system flourishing there, fifteen and twenty centuries before Christ. It may be traced through the most distant ages, and the most varied religions. "We find celibate men and women among the Nazarenes, and Essenes of Judea," says Lecky; "among the priests of Egypt and India; in the monasteries of Tartary; and the histories of miraculous virgins are numerous in the mythologies of Asia." "Superfluous women," therefore, in the modern acceptation of the word—because they are unmarried, or in excess of marriageable men—have always existed. History makes honorable mention of some of them, in its very earliest records.

But, while in the past, the older civilizations and religions have made life honorable for the women who have preferred not to marry, so that they have been dignified, respected, and useful, there is a tendency to-day to complain of those who fail to become wives and mothers, and to grudge them any other career. Herodotus tells us that once a year the Babylonians held a wife auction. All their marriageable girls were then disposed of to the highest bidder. The handsome girls were sold first, and brought large prices. The money thus obtained was divided into dowries for the poor and homely girls, whom nobody wanted, but who found purchasers, because of the money given with them. Modern society persists in making marriage the one destiny of women, in the face of actual impossibilities, and reluctantly concedes them any other vocation, if, for any reason, they

fail of wifehood. It goes beyond this, and insults the unmarried with the adjective "superfluous," sneers at them as "old maids," and brands them as "social failures."

Let me not be understood as depreciating marriage. God forbid! I magnify marriage. It is one of the most beneficent institutions of our social life. If the sun were what the Greeks fabled he was—a god riding through the heavens—he might be pardoned if he halted his chariot, and prolonged the day, to gaze into the beauty of that home, made by a noble marriage. But notwithstanding my exalted conception of marriage, and a tendency that increases with years to recognize a spiritual law underlying marriage, I utterly object to the theory that marriage is the only legitimate business of women, because tens of thousands of women throughout the civilized world, every year, fail to realize it as their destiny. And I reject the narrow statement that the only training needed by women is that which will fit them for marriage, for the same reason, and because such a training is necessarily very incomplete.

Womanhood comes in advance of wifehood and motherhood. And the woman who is trained to a noble ideal of womanhood cannot make of life a failure, albeit she may be no man's wife and no child's mother. "I consider there is no more respectable character on earth," wrote Charlotte Brontë, "than an unmarried woman who makes her own way through life quietly, without support of husband or brother. Who retains in her possession a well-regulated mind, a disposition to enjoy only simple pleasures, fortitude to support inevitable pains, and sympathy with the sufferings of others." Until within a few months of her death, Charlotte Brontë was a shining exponent of her own theory.

Not alone has the Catholic world developed a noble order of women, who, unmarried, have been living benedictions to society, and whose expatriation would, to-day, result in vast misery to thousands of forlorn, wretched, friendless creatures. The Protestant church has been glorified by a great host of grand women during the last half century, whose fate has been to walk alone through life, unwedded, because duty or choice compelled it, but who have made of themselves a power for good in many departments of usefulness. They have not been organized into sisterhoods, they have worn no regulation costume, they have not hidden themselves away from the eyes of the world. They have been foremost in philanthropy and self-sacrifice. They have added new power to literature and art. They have carried the helpfulness of their strong souls into prisons and hospitals, and to battle-fields. They have stood on every round of the ladder of learning, like the angels of the patriarch's dream. They have entered the lists against physical ills as physicians and surgeons. They have been the priestesses of religion in the church and Sunday-school. In asylums and reformatories, as educators of the freedmen, and missionaries to the heathen, and in private homes invaded by trouble, crime, sorrow, sickness, and death, they have been, and are, the very ministering angels of our Father.

Who, among older women, does not cherish the memory of Maria Edgeworth's humane and moral novels? The cheerful domestic tone of Miss Mitford's sketches and reminiscences, the religious works of Hannah More, and the dramas of Joanna Baillie, who aimed to elucidate in every drama, one particular passion or vice? Who can estimate the debt of the world to Harriet Martineau, whose life of seventy-four years was one of immense accomplishment? What a power for good was Angela Burdett-Coutts, during her fifty years of unwedded life, during which she spent over ten millions of dollars in philanthropy and re-

form! How noble the life of Mary Carpenter, who for forty years was publicly connected with the work of prison reform, and industrial schools for girls, in England and India! Of Fredrika Bremer, the Swedish authoress, whose exquisite novels, forty years ago, changed the legal and educational status of women in Sweden!

Rosa Bonheur wears the cross of the Legion of Honor, given her by the Empress Eugénie, because of her unapproachable genius as a painter of animals. Florence Nightingale was decorated with the Cross of Victoria, at the close of her marvelous hospital and sanitary work during the war of the Crimea. Caroline Herschel received from the Royal Society a gold medal in recognition of her own astronomical work, while receiving a salary by order of the crown as her brother's faithful assistant. Charlotte Brontë triumphed over every unkindness of fate, and put heart and conscience into books that are still full of fascination, and spiritual power. Frances Power Cobbe is to-day the most eminent literary woman of England, whose pen illuminates all subjects, and who has laid women in her debt by her matchless work, "The Duties of Women." Maria S. Rye and Annie MacPherson have crossed the Atlantic ten and fifteen times, with two or three thousand friendless girls and street Arabs of London, whom they have placed in homes in Australia, New Zealand, and Canada.

Dorothea S. Dix has spent her life improving the condition of paupers, lunatics, and prisoners, in America. Drs. Elizabeth Blackwell, Marie Laskrzeska, and Cordelia Green were the pioneers of the medical women of to-day in our country, and have made it easy for them to practice the healing art. Catharine Beecher and Mary Lyon were pioneers in the work of higher education of woman, the former founding a woman's college, and the latter Mt. Holyoke Seminary where she adopted the principles, as motives to progress, which later, were employed by Dr. Arnold at Rugby. Maria Mitchell, the astronomer, wears the gold medal of the King of Denmark, because of telescopic discoveries; and while Professor of Astronomy at Vassar College, makes the observations used by the United States Government in its coast survey, and in the compilation of the nautical almanac it authorizes.

The story of Charlotte Cushman, who, for forty years, trod blamelessly the paths of a dangerous profession, of Clara Barton, who is, *par excellence*, the Florence Nightingale of America, of Harriet Hosmer, our American sculptor at Rome, of Elizabeth Peabody, sister-in-law to Horace Mann and author of the American Kindergarten, of Alice and Phebe Cary, who consoled themselves amid the buffettings of adverse fortune, and cheered the world by the sweetness and faith of their songs, of Anna Dickinson, the peerless girl orator, who became almost a second Joan of Arc during the nation's four years struggle with treason—I lack space for a brief record even of their worthy work.

I can only mention the name of Anne Whitney, the Boston sculptor, whose bronze Samuel Adams glorifies Dock Square in Boston, and whose marble Harriet Martineau stands in Wellesley College, a stimulus forever to its girl students. Louisa Alcott, whose books now number more than half a million in the aggregate, all helpful to old and young, has written them while guiding the feet of an aged mother down the dark valley, enveloping an invalid father in more than a daughter's tenderness, and acting as a blessed providence to fatherless and motherless sons and daughters of her own sisters. Elizabeth Stuart Phelps, while isolated in a perpetual struggle with illness and sorrow, wields a vigorous pen for the right against the wrong, the oppressed against the oppressor.

Shall we omit Abby W. May, foremost in the work of the Sanitary Commission twenty-five years ago, prominent in the work of education and reform to-day? Or Frances Willard, leading her countrywomen in their righteous war on the dram-shop and saloon? Or Susan B. Anthony, who has advocated women's rights for forty years, and received, in recompense, unmeasured abuse, bitter calumny, and stinging insult? There are Lucy Larcom, and Edith Thomas, sweet singers along the dusty highway of life; Lucretia Crocker, Ellen Hyde, and Anna Brackett, types of a noble army of teachers; Susan Hale and Sara Clarke, representatives of an increasing class of women artists, the latter, the only pupil Washington Allston ever had; Christine Ladd of Johns Hopkins University, one of the ablest writers on mathematics; Grace Anna Lewis, a faithful devotee of science, whose work has received its meed of praise.

To continue the catalogue would be to include the names of many of the most eminent women of the day. They are all swept by the nomenclature of social science into the category of "superfluous women," for, not having married, they failed to realize the generally accepted theory of woman's being. Bereft of them, the world would suffer heavy

loss, and society be halted in some of its noblest endeavors.

"Superfluous Women?" Yes, there are plenty of them, and of superfluous men also. But you will not always find them among the unmarried. *They* are superfluous women, who give themselves to idle pleasure and morbid fancy, and despise the activities of the age into which they are born. Who are so lacking in principle that they will accept any man in marriage—an octogenarian, an imbecile or a debauché—if his establishment be satisfactory. Who anchored in the haven of a husband's love, and surrounded by the evidences of his practical thoughtfulness, become steeped in selfishness, and make their whole life a hot pursuit of folly and fashion, interested only in the whim of the hour.

Let the estimate of woman be changed, so that she may be valued for what she is in herself. If she be worthless as woman, she will be worthless as wife and mother. Let her training be such, that whether married or single, she shall have character, ability to stand alone, with value in herself. Then will she enrich society, and whether wife, mother or celibate, she will, in no true sense of the word, ever become a "superfluous woman."

THE MIDWINTER HARVEST.

BY CHARLES LEDYARD NORTON.

There is a "Harvest home," that the poets never sung, at dead of winter in the frozen North. No seed was planted by mortal hand, yet is the yield so plenteous that not all the men on earth can gather it in. Neither can all the store-houses on earth contain it. The moon and the pole-star saw these broad fields ripen while the life-giving sun hid his face. Upon these waters no bread was cast, yet at the midwinter harvest it is found in abundance by thousands of eager seekers. These harvesters reap where they sowed not and gathered where they did not strew, and even the plowman—such are the contradictions of this extraordinary crop—though absent at the planting, drives his furrow deep from morn till night at the ingathering.

It is easily within the memory of living men, that western civilization began to demand ice as a necessity, but the Orient long ago discovered its uses as a luxury. Many a cart loaded with ice or snow, creaked slowly across the Roman Campagna to cool wine at patrician tables in their days when luxury was sapping the foundations of the empire. Still farther back—how far is not known—the Chinese were building ice-houses and carefully harvesting the scant crop afforded by their comparatively mild winters. To them as to the Romans it was a luxury, but its use did not mark a period of decadence. The Chinese not only invented the simplest and cheapest of ice-houses, but he compelled Nature to bring the ice to his very door, and when summer came, sowed his seed under the eaves so that the melting ice watered the growing rice, and nothing was wasted.

The improvident and lavish American will probably never save the water that trickles from the twenty-five million tons of ice that he annually stores away in acres of scientifically constructed ice-houses; but though he uses his abundance with characteristic extravagance, he uses it quite as much for the necessities as for the luxuries of life—quite as much for the alleviation of distress and pain, as for concoction of American mixed drinks.

The practice of husbanding ice in winter for use in sum-

mer, crossed the ocean with the first settlers in America. From time immemorial our English ancestors have improved their somewhat restricted privileges in this respect, and naturally the custom was perpetuated by thrifty householders in their new home. Probably a single New England winter convinced the Puritan Fathers that they could not keep up the English practice of gathering the thin sheets of newly frozen ice every morning before sunrise, as is still the custom during freezing weather in England.

Ice as clear as crystal, and a foot in thickness must have presented engineering difficulties of a serious character to men who sought to gather it before suitable tools were invented. The problem was speedily solved, however, as soon as the inventive quality of Yankee air had time to make itself felt in the brain fiber of the rising generation. No sooner was the war for independence at an end,—probably before that time, Boston had its ice dealers, and the American of the period proudly asserted his right to drink ice-water in defiance of the doctors who declared then, even as many of them declare now, that it would or should prove fatal to the race, if persisted in.

That there was a very considerable local consumption of ice prior to and during the Revolutionary war, is certain, but not until after independence was secured did the idea of exportation to the domestic ports take practical shape. Boston naturally took the lead, her northern latitude rendering the crop almost certain, while her large fleet of sailing vessels afforded an easy means of shipment to the coastwise markets. By 1805, the trade had attained considerable importance, but no one, so far as is known, had seriously contemplated an export trade with foreign lands. Boston, however, had an enterprising merchant in the person of Frederick Tudor, who in the year named, announced that he was going to ship a cargo of Massachusetts ice to the island of Martinique, where yellow fever was then epidemic, and where he believed a profitable market could be found. He was well laughed at, but being of an obstinate disposition he persisted, cut three hundred tons on his own pond, loaded

it on his own brig, (the "Favorite,") sailed as his own supercargo—and bore the resulting pecuniary loss with his own peculiar equanimity.

From his point of view, however, it was not a failure at all, and only the second war with Great Britain checked his undertaking. Ten years passed and then it appeared that John Bull's memory was good; for Mr. Tudor received an official communication, which resulted in a monopoly for him of the ice trade with the British West Indies and a modification of the very heavy port dues in favor of all vessels bringing cargoes of ice. Mr. Tudor at once built store-houses at Kingston, the capital of Jamaica, then the richest of the British American possessions, and the company which he established secured the monopoly of the trade with Havana. Thus began an export trade, that grew with wonderful rapidity.

In 1833, this same enterprising Bostonian decided to ship a cargo of about two hundred tons to Calcutta. In spite of the greatest care in packing, nearly one-half melted before the vessel reached her destination; but the remaining one hundred tons were marketed at a good price, though not enough to render that particular voyage a pecuniary success. The venture was sufficiently successful, however, to warrant a repetition; and a trade was established that has steadily grown ever since. By 1836, Mr. Tudor had extended his mercantile conquests to South America and held high court at Boston as the acknowledged "Ice King" of all the world.

He was not, however, suffered to hold undisputed sway, for in 1842, and subsequently, experimental cargoes were sent to London by other Boston dealers. Their ventures proved unsuccessful and although they gave the name "Wenham Ice" to the London dealers, the real American article never gained a foothold. England secures her main supply from Norway, but a conviction still prevails in many quarters that the native article in sheets not much thicker than heavy plate glass, is in some mysterious way, of a superior quality.

It seems well-nigh incredible that until 1831 New York city imported its ice from Boston, with an inexhaustible supply at its very doors. No New Yorker saw the golden opportunity. It remained for three countrymen, resident near Rockland Lake, to perceive the anomaly nature had kindly formed, a hollow in the crest of the hilly range that forms the west bank of the Hudson, and had filled it to the brim with purest water. The lake surface was about one hundred fifty feet above the river, and thirty miles to the southward lay the growing metropolis of a young republic that even then promised to rival in population the mightiest monarchies of Europe. Yet it was with the extremest caution that these humble men proceeded to inaugurate what is now one of the principal branches of river traffic. They dug a pit during the summer, and when winter came, filled it with the solid crystal cakes that New York now knows as Rockland Lake ice. When summer came again, they built a rude cart with wheels made from the cross sections of a log, and allowed it to trundle down the steep incline to the water side, carrying about a ton of ice. The New York steamboat took it to the city full, and brought it back empty, as long as the supply lasted, and the result was so satisfactory from a financial point of view that the business was continued. Two years later the firm of Barmore, Feltor & Co., purchased Slaughter's landing dock, at the riverside below the lake, built an ice-house capable of holding one thousand five hundred tons, formed a company into which seventeen neighbors put one hundred dollars apiece, and the great Knickerbocker Ice Company was founded.

A small store-house was built in New York and thirty-ton sloops sailed to and fro, between city and landing, until the business outgrew its swaddling clothes. Then came the quarrel usual in such cases, and Mr. Barmore, who appears to have possessed the brains of the concern, bought a controlling interest and founded the firm of Barmore, Leonard & Co., built larger houses, and began to run barges of several hundred tons burden to and from the city. For several years primitive methods of cutting and handling were employed, but at length after the slow fashion of those days, a rumor reached the banks of the Hudson that these things were better done in Boston. The firm accordingly sent a spy to Massachusetts, who visited Fresh Pond during harvest season, and took copious notes of what he saw. But when he returned, instead of imparting his knowledge to his employers, he organized a new firm under the style of J. D. Ascough & Co., introduced Bostonian methods and left the Rockland Lakers in the lurch. A bitter war between the conflicting interests ensued, ice-houses were established on Roundout creek, and the protracted strife that followed ruined all but three of the companies engaged. These consolidated in 1855 as the Knickerbocker Ice Company, with a working capital of nine hundred thousand dollars, free from debt, and it survives to-day as one of the strongest corporations in the trade.

The Rockland Lake works are now pointed out to every Hudson River tourist. A long slide leads from lake to river, and spacious storage houses line the water side where a generation and a half ago, rude one-ton trucks delivered their punty burden to the slow sailing sloops of the period.

It was not long before the river itself began to pay tribute. The salt sea pushes its tides well up toward the Highlands, and renders the ice crop of the lower Hudson comparatively worthless for commercial purposes; but north of the mountain barrier, the climate is colder, the water ceases to be brackish, and save in exceptionally mild seasons the river yields a sure return to hundreds of ice-men. Every winter, it is true, the New York papers improve the dull period between the Christmas and Easter holidays by sending reporters up river with orders to extemporize an ice-scare, and elaborate statements are prepared, demonstrating the probability of a short crop with correspondingly high prices. But the Hudson usually sets their prognostications at naught, and April sees an ample supply ready for shipment to the city wharves. Last spring, for instance, after an unusually baffling experience of thaws and rains, nearly two and a half million tons were stored along the Hudson River. This was a matter of a million tons short of the fall storage capacity of the houses, but it was enough to guarantee the metropolis against the danger of an ice famine.

The Maine ice crop, too, affords a supply that can be counted upon almost to a certainty, and when the more southerly fields fail, there is usually time in March or April to make good any deficiency from the still frost-bound Penobscot and Kennebec. From these rivers and from their contiguous lakes and branches, a million and a half tons of ice are annually garnered. From this source, too, the more southerly cities of Philadelphia and Baltimore largely draw their supplies. In Philadelphia is another Knickerbocker Company, often confounded with that of New York, but really an independent organization. It has its houses along the Delaware and the Schuylkill, but evidently provides for emergencies by making engagements on the main rivers, that supplement all probable deficiencies. So, too, with the cities still farther south. In severe winters, Baltimore and Washington can count upon a considerable supply from the immediate neighborhood, but it is un-

certain, and more northerly latitudes must make good the shortage. Chicago has a tolerably sure supply from the Desplaines River, and failing that, can, with a little foresight, house more than enough for her requirements from the northern harbors of Lake Michigan. St. Louis has the whole upper watershed of the Mississippi and the countless lakes of northern Kansas. And of course our Canadian neighbors can hardly go amiss for ice of the finest quality at their very doors, provided they can get rid of the superincumbent snow.

In the United States the annual ice crop amounts in round numbers, as has been said, to about twenty-five million tons; but this is largely guess-work as there are thousands of private ice-houses where, in the aggregate, large quantities are stored of which no returns are attainable. In many villages and small towns in the northern states, local companies are formed which erect ice-houses sufficient for the need of the community, and fill them from some convenient lake or mill-pond. Failing these, some low-lying field is flooded during the severest weather of winter, and is suffered to perform its normal functions as pasture or arable land in summer.

No one who lacks personal experience can form any conception of what it means to handle a thousand or a million tons of any given substance. Perhaps the most familiar approximate example to the average housekeeper is a ton of coal. It is dumped in front of the house, and a man goes to work to put it into the cellar. Watch him and time him, multiply his time and his labor by one thousand, and you may gain some idea of what it costs to fill an ice-house of moderate size.

A yield of one thousand tons to an acre is regarded as a very good average crop. There it lies glistening in the sun. Perhaps it is a foot thick, but how very solid and unapproachable! A railway track might be laid upon it, and it would bear the transit of a moderately heavy train. If you attempt to cut through it with an axe you will find the task by no means easy. How then, shall it be cut up into those beautiful clear cubes that you want the blue-shirted ice-man to deliver next summer? The difficulty of the problem is increased if the ice has been rained upon and snowed upon, until, perhaps, for several inches it is permeated by air bubbles and rendered unfit for household use by a mixture of snow and, possibly, dust.

The ice-harvester has learned by experience how to organize a force of men that will house five thousand tons a day; but he must have the necessary tools and machinery. These were invented, substantially in their present form by Nathaniel Wyeth of Cambridge, Massachusetts, about fifty years ago. He was employed by Mr. Tudor the ice-king at the time, and his ingenuity, no doubt, helped to establish that monarch upon his throne. It is hauled into a central heap, or to the shore. This done, a long straight line is laid off on the ice, and from this another, exactly at right angles to it. Then a machine called a "marker and guide" is drawn by a horse along the straight line. This machine has a cutting edge which scores a deep groove in the ice forty-four inches from the original straight line. Reaching the limit of the cleared ice, the machine is turned round, the guide being placed in the groove already cut and the horse walks back again, the marker making another groove forty-four inches from the first. So back and forth the marker goes until the whole surface is marked off in parallel lines like the rulings on a sheet of paper. This done, the same proc-

ess is repeated at right angles to the former direction until the whole surface is marked off in squares like a checkerboard. Then follows the plow, also drawn by horse-power. It is like an exaggerated saw with long, curved teeth which, properly weighted, runs in the grooves already made, and deepens them several inches, but never, intentionally so much as to let the water in.

These processes are begun near the storage house, and as soon as enough progress has been made, a few of the cakes are separated by means of a handsaw, and hauled out of the water. As soon as there is a clear space, heavy wedge-shaped chisels are brought in play and cakes can be broken off as fast as a man can strike two or three downward blows with his chisel. A canal leading to the hoist-way is thus opened and as soon as it is wide enough, rafts of ice are detached from the main body and pushed along the canal to the inclined ways by which an endless procession of cakes moves to the store-house.

These ways are of peculiar construction. Most of our readers have seen a common horse-power with a moving floor or treadway on which the animal walks and never reaches the end because the floor is endless and revolves over and over upon a set of wheels. Such a floor as this, but on a much larger scale, is made to revolve by outside power. Its lower end is under water, and to this the ice-cakes are floated until they lodge successively upon the moving incline and are delivered by it at the storage levels. Men stand ready with spiked poles to shove the cakes upon a platform whence others push them with scarcely a pause onward and pack them closely in layers all over the great cold interior spaces of the building, until it is full to the eaves. Hay or straw is spread over the topmost layer, and everything is shut up tight until the crop is wanted for delivery.

It is not here intended to enter upon elaborated statistics. Enough has been written to indicate how great an army of men depend directly or indirectly upon the midwinter harvest for their livelihood—cutters and packers, drivers of wagons, sailors, clerks, and mechanics, to the number of many thousand, depend upon ice for their subsistence.

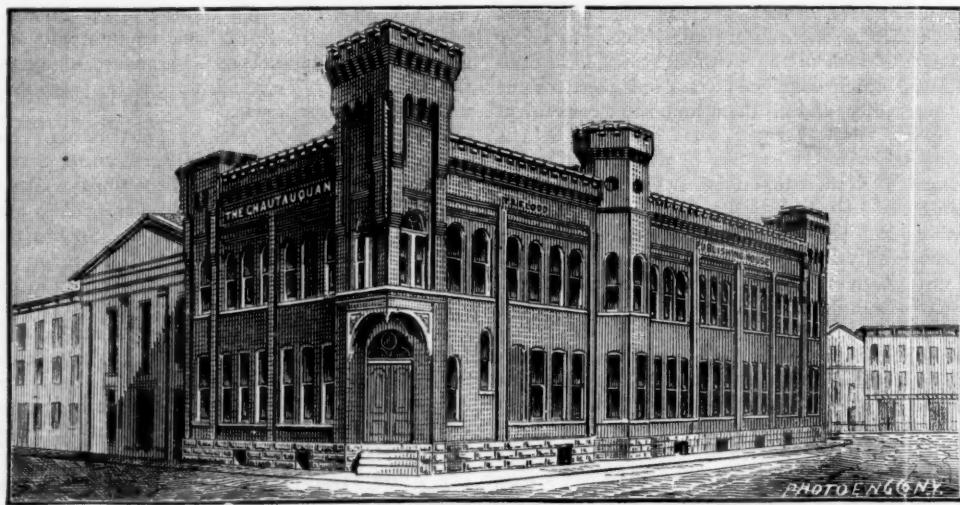
The trade has its regular "exchange" in New York, and its representative, *The Ice Trade Journal*, is published in Philadelphia. Every year the demand is increasing. New York City alone uses annually more than two million tons, and every year sees an increase of consumption at the south, and in the growing towns of the interior. It is not probable that even in the most easily accessible markets, the price to house-keepers can be reduced below the present rate of about forty cents for a hundred pounds. There is a prevailing belief that since the dealers pay nothing for their ice, the receipts are all clear profit, but it is a delusion since the gathering, and transportation must entail heavy expenses. The great corporations are of course bent upon growing rich which is the legitimate object of all business, and equally, of course, they will charge consumers the highest rates they can be made to pay. The abundance of the supply, however, is a tolerably sure safeguard against undue extortion in this matter so long as the lakes and rivers remain free to all who care to use them.

The artificial production of ice promises to assume an important place among the manufactures of tropical regions, but this is a distinct branch of the subject. The natural ice crops of the north must, for many years to come, afford the main supply for the world at large.

HOW THE CHAUTAUQUAN IS MADE.

Nearly one hundred years ago, in June, 1788, western-bound settlers first reached the French Creek Valley of northwestern Pennsylvania, and twenty-four miles from the junction of the stream with the Allegheny River, broke soil and laid the foundations of a town. The valley into which they came, already had a history. An Indian village stood not far from the new settlement and the remains of a French fort

extraordinary rapidity with which the magazine rose in public favor, demonstrated some two years ago the necessity of larger accommodations, providing more extensive facilities, than were to be found in the city. Plans were at once laid, and one year ago the work of building a block for the use of the magazine was begun. By the middle of the past summer the building was so near complete that it was possible to



THE CHAUTAUQUAN BLOCK.

of supplies lay near by on the banks of the stream to which those early explorers had given their name. Fort Venango was but twenty-four miles away, and the Indian trail followed by Washington in his memorable tramp from that point to Fort Le Boeuf, in 1753, became the principal highway of the settlers.

Mead's Block House, as the young town was called, fought its fight with hostile Indians, lost now and then a man, occasionally fled for safety to Fort Venango, but at last came out a peaceful community under the title of Meadville. After the cessation of Indian hostilities, the records become hopeful and uneventful. In 1811, its monotony was shaken by two earthquakes; in 1815, an institution of learning, now Allegheny College, was established; in 1825, Lafayette was a visitor; in 1834, Harriet Martineau found her way hither and gathered enough of interest to fill two pages of her "Autobiography"; in 1887, it is a prosperous city of ten thousand inhabitants, furnished with two colleges, Allegheny and the Unitarian Theological School—each with good libraries—a well selected city library, several fine private libraries, varied and increasing business interests, and the modern contrivances of electric light, natural gas, illuminating gas, water works, street sewerage, and, in prospect, a street railway.

But to the readers of *THE CHAUTAUQUAN*, the fact of peculiar interest about Meadville is that it is the home of the magazine, the official organ of the Chautauqua Literary and Scientific Circle. Since the first number was printed here in October, 1880, this city has been its headquarters. Among other advantages making Meadville a peculiarly appropriate home for *THE CHAUTAUQUAN* is its nearness to Chautauqua Lake which lies only seventy-five miles distant. The

issue from it the first number of the present volume.

THE CHAUTAUQUAN block is situated on the corner of two principal streets of the city, Park avenue and Center street. The architect of the building was Mr. Jacob Snyder of Akron, Ohio. It is a brick structure one hundred eight feet in length by forty in width, two stories in height, and surmounted by square towers; roof and towers are finished by a battlemented parapet capped with white stone. In planning the building its adaptability to the work was consulted at every point. The ventilation and light are perfect; natural gas furnishes heat; illuminating gas and city water add to its convenience; the machinery is run by water power; and pneumatic speaking tubes put all the rooms in direct communication. The front entrance to the block is into a pleasant square hall; following the winding stairs into the upper corridor, we find the office of the editor-in-chief, occupying the corner of the upper floor directly over the vestibule. From this pleasant room with its open grate and handsome furnishings, come the plans which animate the building. Two large and finely equipped rooms occupied by the assistant editors and proof readers, on the opposite side of the hall, complete the editorial suite.

At the right of the stair-case is the Business Office, the link connecting the magazine with the outside world. Here all mail is received, opened, and distributed. During the period of "making up the list" five hundred or more letters containing from one thousand to two thousand subscriptions are frequently received in a day. Keeping the books, entering the subscriptions, and looking after advertising are also the work of the business office. The books in which the subscriptions are entered are most suggestive and interesting. Each state and territory of the Union has its own

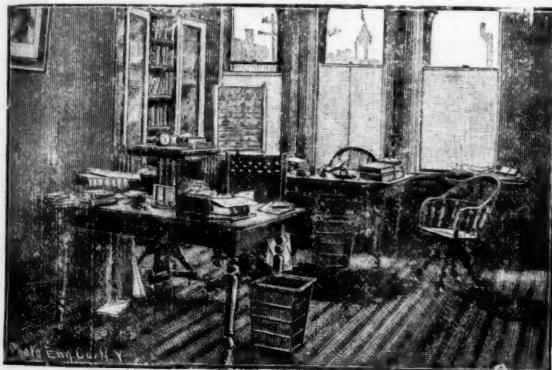
volume, and one book is filled with foreign addresses. From their bulk the centers of the C. L. S. C. work are easily told, and by them the path of Chautauqua can be traced north,



EDITOR'S SANCTUM.

south, east, and west, as well as through the twenty four foreign lands into which it goes.

Opening from the business office is the Wrapper Writers' Room, where a bevy of clerks pen their way day after day, through the big folios, writing the wrappers for mailing the magazine. Their progress is so timed that when the magazines for the month are bound, dried, cut, and trimmed, the wrappers for the entire edition are written. In both these departments the work is done entirely by women. The



ASSISTANT EDITORS' ROOM.

head book-keeper and cashier, assistants, advertising clerk, entering clerks, and copyists are all women.

The rest of the upper floor is in Stock Rooms where extra copies of each number, sets of back volumes, and supplies for the editorial and business offices are kept.

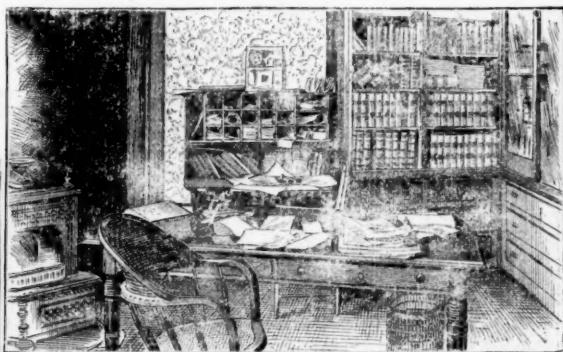
The making of a particular number of the magazine begins in the Editor's Sanctum long before any steps are taken for its material realization. When January comes, this office has ready a full plan for the March issue of the magazine. A schedule containing the detailed list of articles, department work, and editorial discussions has been arranged, and the other departments now bend their energies to carrying out the plan.

But an editor never knows the satisfaction of one thing at a time. On January 1, he must not only have the March issue ready, but April assured, May bargained for, June beyond a doubt, July in mind, and an acquaintance with the coming volume begun. He works for the future. If he wishes to discuss subjects in season he must prepare them out of season. His "Midwinter Harvest" must be bargained for when there is ice nowhere but in the refrigerator, and he

must arrange for "spring poetry" with the thermometer in the zeroes.

If the reader will examine his copy of the magazine, he will find it divided into five parts of sixteen pages each. Each part is marked on the lower left hand corner, as in the present issue, "A-jan.," "B-jan.," etc. These parts are called "forms" and are printed separately. Take the "A," or first form: The editor having received from the counselors of the Chautauqua Literary and Scientific Circle the required readings for the month, arranges for the additional articles for the literary and other departments. The assistant editors must see that the copy is "in" on time and that it is properly prepared for the printer. This latter is an important piece of work, for the errors which are left in copy and reappear in print must be righted on the proof, causing tedious and exasperating work to the printer over the types. The preparation of the copy consists in deciphering the chirography, sometimes an exceedingly difficult task, marking letters to be capitalized, indicating italics and any unusual use of type, revising sentences, and verifying facts; in short, making of the copy a perfect model for the printers.

From the Assistant Editors' Room the copy is passed to the Composing Room, a large and airy apartment on the first



PROOF READERS' ROOM.

floor at the end of the building. The chief furniture of this room is the cases and racks for holding the type, the "imposing stones," or tables with marble tops, and the "proof press." Nearly three tons of type are used in making THE CHAUTAUQUAN. This type is divided into fonts as a complete outfit of any one kind is called. As the body of the magazine is set in *bourgeois* type, each printer receives an upper and lower case of *bourgeois*. If he sets editorial matter, or *C. L. S. C. Notes*, he uses another case containing

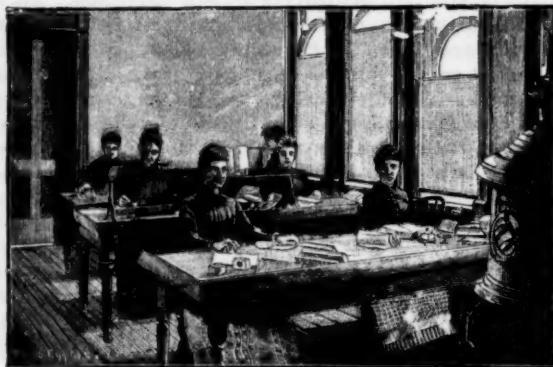


BUSINESS OFFICE.

brevier type; if he sets *Questions and Answers*, or *The Question Table*, he uses *nonpareil*. Type for a compositor's use

HOW THE CHAUTAUQUAN IS MADE.

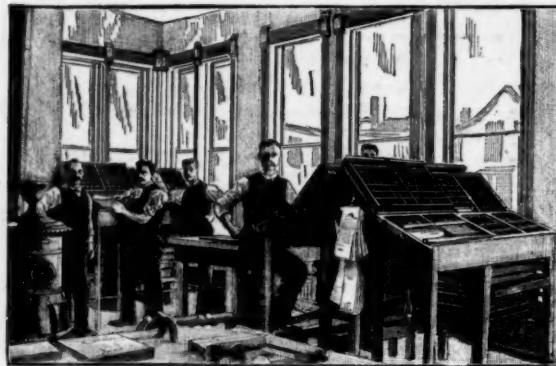
is placed in a "case," a shallow box about two and one half feet long by half as broad, and divided into compartments for holding the different "sorts," or characters. Two of



WRAPPER WRITERS' ROOM.

these cases, an upper and lower, are generally used, the former containing capitals, small capitals, fractions, and reference marks, the latter, small letters, double letters, figures, points, spaces, and quadrates. The cases are placed in an inclined position on racks about breast-high, where the type can be picked out by the compositor standing before them.

The copy sent to the foreman is divided into "takes," as



COMPOSING ROOM.

the number of pages given each man is called, and is set by the compositor. A quick-witted, much-abused class are the printers. It is the custom for editor and author to lay at their door all the errors which creep into print, but could the public examine much of the copy placed before the printers, they would wonder not at the blunders but at the general accuracy.

As fast as the type is set, it is placed in an oblong, flat, brass tray, or "galley," holding from twenty to twenty-five inches of composition. When the galley is full, a "proof," or impression, is taken on the proof press. This "galley-proof" is sent upstairs to the Proof Readers' Room, adjoining that of the assistant editors. To the proof reader and copy holder is given the task of correcting all printers' errors, such as wrong font letters, misspelled words, inverted letters, omissions, and the like. It is a time-taking, microscopic

work, demanding a wide range of information, good judgment, a quick eye, and complete concentration. In reading the "first proof," the object is to correct only printer's errors, that is to see that the print is like copy. The printer is not held responsible for errors which were in copy, his instructions being to follow it right or wrong. For the mistakes he makes, however, he is held responsible, being obliged to correct them free of charge.

The galley corrected, it is returned to the composing room where the mistakes are rectified in the type. When this is done "revises" are taken, one each for editor, author, and proof reader. In the second reading all changes from copy are made. Very often these are so many and so violent that correcting the type is almost as great a task as setting it in the first place. These serious changes are made usually by the author.

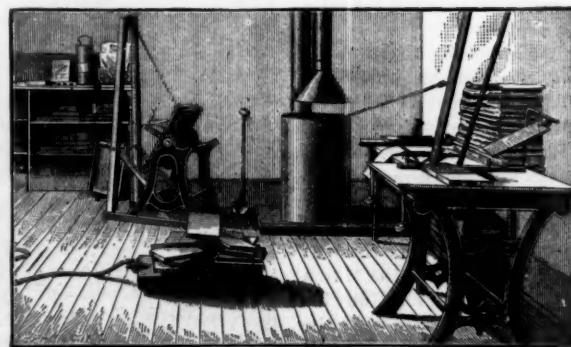
After the second set of corrections has been made, the type is ready to be put into pages. It requires about sixteen galleys of type to make a form of THE CHAUTAUQUAN. When this amount is ready the process of "making-up" begins. The type is measured off and arranged in pages. As rapidly as the pages are made up, proofs are taken for examination by the proof reader. On an imposing-stone, the foreman so arranges the pages that each will have a proper margin and will come in regular order when the sheet is printed and folded. The form is now locked in an



PRESS ROOM.

iron "chase," or frame, by means of "quoins," or wedges, and is passed to the Press Room.

The press room in THE CHAUTAUQUAN block occupies the center of the first floor of the building. It contains three of Campbell's best book presses, a Gordon job press on which THE CHAUTAUQUAN circulars and stationery are printed, two folding machines, and a number of tables for stacking forms as they come from the press. Into this room the form is brought and placed on the press. A "form-proof" is at once submitted to the proof reader to see that all previous corrections have been made and that no accidents have happened in the transports from the composing room. Very serious and to the uninitiated, inexplicable mistakes do occur in changing forms; as, for example, a form of a leading magazine, after running several hours, was taken from the press on account of an



STEREOTYPING ROOM.

accident to the machinery. In returning it to the press, a line fell out and was replaced, where it was before, it was



BINDERY.

supposed. After a few hundred sheets had been run, it was discovered that the line had changed places with the one above, making an utterly unintelligible medley of a recipe.

The skill of the pressman now is tested in "making ready" the form, and in examining to see that it is properly locked up, planed down, and exactly adjusted to the bed so that the machinery will work smoothly.

The ink and paper which the pressman uses are in stock in the store room in the basement of the building. Of ink he will require for a number, something over two hundred pounds for cover and forms, and of paper it will take a car and a half full. The paper comes in sheets thirty-four and one-fourth by forty-eight and one-eighth inches in size: when the press is ready, these sheets are piled on the "feed board" and are "fed" into the press. Fifty-seven thousand copies of each of the five forms and of the cover of *THE CHAUTAUQUAN* are printing at the present writing. It is a task that requires three presses every day of the month. Printing by no means ends the work with the form. These great sheets must be dried and folded. Two folding machines are busy the entire month with this work. When folded, the forms must be counted and stacked to wait the coming of the sister forms from the press.

A still further operation awaits the types from which the printing has so far been done; it is the stereotyping. Adjoining the composing room is the apartment in which this operation is carried on. Here is a large moulding press heated by steam, in which a mould, or matrix, is made of each page of the form. This matrix is put into a casting box and melted metal from a furnace in the room, poured around it, forming a cast of the face of the type. These plates are squared to a regular size, and from these, printing may be done precisely as from the types themselves. A lasting copy of each page is now in the possession of the office, and the type may be re-

leased from its bonds and distributed again to the cases from which it came. The "distribution" of type means simply putting back each letter and mark into the apartment of the case in which it belongs. The compositor takes up twenty or more lines at once and throws the "sorts" with a marvelous rapidity, ten or twelve a second.

The process through which the "A" form has gone must be repeated with forms "B," "C," "D," "E," and the cover. When the five forms are printed, "gathering" begins. In the Bindery the forms have been stacked in "bins." A certain number of each letter is placed before the gatherer who picking up one of each, places them in order. The gathered forms pass to the stitchers who sew them together on sewing-machines run by water power. From the stitcher the magazines go to the paster who puts on the covers and lays them in piles for drying. When dried they are passed in piles of from fifty to one hundred to the cutter and trimmer. With his perfectly adjusted machine, in a trice, he trims the rough edges and cuts the leaves. When they leave his knife the magazines are ready for mailing.

When six thousand or seven thousand copies have left the cutter, the mailers take possession of the mailing



MAILING ROOM.

room. This room on the first floor, opening from the front vestibule, presents a lively scene during mailing week; to dispose of twelve and one-half tons of magazines in six days means quick work, when each copy must be wrapped in its own envelope and all going to the same post-office, tied into bundles. A row of striped canvas bags bearing the familiar inscription *U. S. (I) MAIL*, receive the bundles from the wrappers. When a number of these are filled,

the mailing wagon of the establishment is brought to the great doors opening from the room, the bags are tumbled in, and the magazine, which a year ago began bubbling and boiling in the editor's head, and on which for a month three score and more of persons have been at work, is driven away to be consigned to the efficient care of the Postal Service.



GOING TO THE POST OFFICE.

MARS HILL AND THE OLDEST ATHENS.

BY BISHOP JOHN F. HURST, LL. D.

A walk of only two or three minutes will take one from the Acropolis in Athens to Mars Hill. The latter is on the same general elevation. We go out of the Propylaea or gateway of the Acropolis, descend the hill only for a few rods, and rise again to Mars Hill. But this short walk brings one into a new class of associates; you are out of paganism, and into Christianity.

At a distance Mars Hill presents the appearance of a dark mass of rocks, irregular and unattractive, and cleft in the middle by a great fissure. No building of any kind stands upon it. The plateau, if it can be called so, is small, and only remarkable for its historical memories. There is no doubt about the identity. When you come away from the Agora, or ancient market-place, and ascend the sixteen steps cut out of native rock, and stand in the small space about which the judges of the Areopagus sat, on seats likewise cut out of the rock, you know just where you are. You are on Paul's throne.

Just here, in this wonderful Athens, you possess one of the greatest charms of any group of ruins. You depend on no tradition. You are in the presence of the truth. No superstitious priest repeats to you with awful mien, what may be the facts concerning the spot on which you stand. With Pausanias in your hand, and with a mere history of Greece to come in to help, you have no trouble. Without anybody to tell you, you know, even from the deck of the far-off steamer, that yonder is the famous Acropolis. Eleusis, down around the bend in the gulf, bears the same name now that it did when the mysteries were enacted, and the road from Athens to Eleusis was thronged with processions of festive worshipers. Three lonely columns, not far from the king's palace of to-day, you know to be the sole remnants of the temple Jupiter Capitolinus. Pentelicus has not changed its name, and so no argument is needed to prove that from its depths have come the marbles which have thrilled the world. Hymettus is still the name, and on this bright spring morning the bees are already humming their sweet song, and busy getting materials for their new storage. The same consoling fact of the certainty of your ground comes in to help you while standing on Mars Hill. It is now what it was when Paul was here—the same unchanged Areopagus.

No place is more positively certain as to its identity, or more favorable to a reproduction of the past, than this one. Paul had skirted the upper coast from Philippi, there he first labored in Macedonia, along by Thessalonica, Berea and the other places which had gone into busy ports along the broken eastern coast of Greece. The towns and cities were supported by the trade of the Aegean Sea, and were fully interested in all that affected the political interests of the Greek republics. After Paul had come down to the great backbone of the peninsula, he took a boat and came around to Athens, passing Sunium by the way, and stepping ashore at the Piraeus.

The walk up to Athens abounded in reminders of ancient Greek glory. We can well suppose that his mind was kindled with intense activity by the memories which the statues, temples, streets, and the whose vast world of Athenian splendor called up. The market place was his chief field of labor. Here the people gathered, waiting for some-

thing new. There is still a leisurely look in the things which now cluster about the market place of Athens. Nothing is ever uprooted here. You can see the same peasant costume to day, in the fields about Athens, as are in stone on the ancient monuments. The very shoe-strings are tied in the same way, and the broad sole is cut in the same shape.

When Paul ascended the Areopagus, and addressed the judges, he had all Greece before him, just at his feet by the Agora. Out beyond him were the Theseum, still standing in all its calm and chaste beauty as when he looked down upon it; the tower of the winds; and the many public buildings and temples which made Athens the world's eye. Beyond the city, on its western side, was Plato's grove; and out on the distant mountain was the place where Xerxes had watched his many vessels and felt his hopes go down in the same bay of Salamis with his proud ships. Just to Paul's right was the Acropolis, with all its splendid temples, and enshrining the most hallowed associations of Greek worship and history. To his left, not five minutes walk away, is the vast inclined plain, where the thousands gathered to listen to Demosthenes. It was the Pnyx, or place of assembly of the Athenian people.

On every great occasion, when some one was to give expression to the popular passion, the people came in vast numbers. So broad and long is this space, and a slight depression withal, that the entire population of Athens could gather here, and, what is more, could hear every word that was said at the far-off stone platform. Here is the platform still, a cutting down of a natural rock, and converting it into a broad and open space, where the orator could have full opportunity. The platform, and the space about it, were capable of accommodating an immense audience. But the Pnyx itself consists of an area of twelve thousand square yards, and could, therefore, easily provide room for the entire body of Athenian citizens. There were no seats here. People stood up, or sat down if they chose, on the bare rocky soil. There was never any covering, so that in rain or sunshine the people were not protected. But the time when the multitudes used to gather to listen to the harangues of their great orators, was at daybreak, and, therefore, before the sun had any power. By the time the rays became hot, the oration was over, and the assembly could return home.

The early morning hour has always been a favorite time for public meetings of all kinds in the older countries. When Wesley held his five o'clock morning service in various parts of England he was simply conforming to a usage which had prevailed in the oriental countries, and in Europe also. Not only was the orator freshest, and most able to exert his powers to fullest advantage, but the people were acute to grasp the thought. This, however, must not be forgotten, that even as far west as Athens the people are accustomed to go to bed early. The twilight is short. It is only a brief time between sunset and total darkness. No sooner is the sun down than bed-time is thought of. In all Turkey the people drop to sleep fairly with the set of sun. Then they are equally early in getting up. They follow the order of nature, and get their full share of sleep.

Here in the Pnyx, as well as in other great spaces in the Greek and Roman world where the people gathered in popu-

lar assemblies, there was a natural arrangement. A favorable site was found, earth was taken out here and filled in there, so as to make the space uniform, and all else was left for the orator. The people could stand—or stay at home. All this comfortable seating for audiences, and the supplying with conveniences of every nature, seem to have arisen from the paid places at the Odea, or theaters. The comfort of sitting must be bought for so many *lepta*.

I tested the power of the voice to reach throughout this great space. One of my companions stood on the *bema*, and I went to the farthest point from him, the outmost line of the Pnyx, and could hear every word he said. He could also hear every word that I said, when we reversed our order. Each spoke, too, in only a conversational tone. The marvelous acoustic qualities of this great open-air area amazed me. While the space about the speaker, which might be called the platform, in want of a better name, could furnish room for several thousand people, the whole area of the Pnyx contains twelve thousand square yards. This was large enough, therefore, for the entire population of Athens.

The associations of this place are of the highest interest. There has been some needless dispute about the exact site of the Pnyx. The precise spot of the *bema*, or speaker's platform, has been questioned. But why? Here one sees the realities. There stretch out on either side of the *bema*, a great stone space, semicircular, where people specially favored could be near the speaker, and have all the advantage of looking on the multitude as well. You can see the very spot where Demosthenes, Pericles, Themosticles, Aristides, and other chiefs of oratory, used to stand and make their appeals to the people. The identical place, just back of the little curve in the outer rim of the standing place is where they stood. No table was there, with cup of water and other ridiculous belongings, such as are stowed away behind the average pulpit of our day. As to a raised support of any kind on which the speaker might rest his elbow, and loll a little, while making announcements, it was never here. There was nothing, even of the size of a low chair, to stand between the speaker and his audience. All such things were, according to the rigid Greek idea of oratory, entirely destructive of the highest effort. The eye must see nothing overhead but the clear sky, nothing below but the earth's crust, and nothing in front but the speaker. The appeal from him must have no interruption. He must come with full thought. He must be ready. He must know his message. The people must see the man, for was not the man the speech?

Now one has only to compare Mars Hill and the Pnyx in order to see the difference between men and their religions. Here, in the one place, stood Paul. He was a stranger. He had been heard of, perhaps, through strangers coming in from Smyrna, Ephesus, and other ports along the Aegean. But he was a new-comer. As he spoke to a throng in the Agora, his was not a familiar face. But the people listened. There was just enough education in the person arrived to make them stop and linger long, and want to hear him again. But opposition came and then Paul went up on Mars Hill. Here was the world's cathedral. Not one day elapsed before all Athens knew it, and not many days passed before it was known in the whole of Attica and the Peloponnesus that the new doctrines from Judaea were openly advocated and explained before the severe judges on the stony brow of the Areopagus. Paul's renown at Athens, for compact reasoning, for clear statement, for masterly skill in force, is without a parallel in human oratory. It was the death knell of Greek polytheism. When the humble

apostle went down those sixteen steps, and walked along the Agora again, he may not have known it, but I suspect he did—he had struck the fatal blow to all that was dearest, most venerable, most treasured, in the pagan faith of great Greece. The Galilean had conquered.

After leaving the Pnyx, I was conducted by Mr. Eckfeldt to the oldest Athens. There are only a few huts here and there, but right where they stand, and along the rocky hill-sides, where nothing stands, was the first Athens. Not far off, perhaps a mile, is the bend in the bay where the first harbor was. The Piraeus is a later affair. The Phalerum is the elder port, and from this bend, the Athens of to-day is still only about one-half the distance that it is from the Piraeus. The Phalerum was where the first fishing village started itself along the shore. Then the houses reached out into the valley, and finally to the Acropolis. One sees here in the native rock the best traces of the obscure group of houses which developed into the port. The cuttings in the rocks record the identical seats where the people loitered, the foundations where their houses stood, and the tombs which covered them when they were dead. This is a peculiarly impressive scene. I sat down on one of these stone seats, cleft in a rude age from the native stone, and still preserving its original shape. The buildings which men had reared in later ages had grown old, and fallen into decay. They were in all stages of decline. Greece had run its race, and gone into the world's history, and helped to make it what it was. But here was the undecayed. The rocky seats and groves of the hoariest Athens were undisturbed, and the goats that belong to the surrounding humble folk browse about there, and pull off the little yellow daisies, with as real unconcern as if they were not walking over, and feeding upon the place where an Athens had stood before the real Athens had sprung up on the brow of the Acropolis. Beautiful is the eternal youth of nature. Man, the new and the destroying, gets old and wastes himself. His works soon run into decay. But nature, the ever young and beautiful, keeps up her smile.

To saunter along the Ilissus, and find your way across it without wetting the soles of your feet, can be done even where it is swollen by the spring rains. We did not hasten here. It was like talking with Aristophanes and the more serious poets of Athens. We returned to the central part of the city by way of the king's garden. This is a beautiful place, of which the public have free use for promenading. There is the air of real democracy about the premises. One can walk up to the very palace steps, and talk with the lazy guards, if the notion strikes him to make inquiries. This is what I did. Indeed, I have often found the royal sentinels very polite, and quite disposed to answer my questions. From some of these, in more than one country, I have gained important information. In King George's garden and park there are five specimens of Greek mosaics, taken from the public buildings at a time when they were plentiful in all directions, and had not as yet attracted the curiosity of the collectors from all Europe. There are some remains of ancient statuary, but of no great value. One wonders why there are not more rich and rare sculptures in the open spaces in Athens, as can anywhere be seen in the parks and family gardens of Rome. This, however, must be remembered, that much of the sculpture of Rome, wherever you find it, is of Greek production.

The prettiest scene I saw in King George's garden was his youngest son, Prince André, a little boy of three or four years of age. His attendant was a Greek servant, who was very patient with the little fellow, let him have his own way, walk where he pleased, and play to his heart's con-

tent. The boy could pull flowers, and give them to any passer-by he pleased, but it was against the royal code—I suppose it is the same in all Europe—for him to receive anything from the hand of a stranger. There is no doubt a reason for this. Little André wore a suit of navy blue, trimmed with white. He has a quiet and pleasant expression, but is so simple and child-like that it is clear he has not fully gotten into his head, as yet, what it is to be a prince.

The king has five other children. There is a good deal of democracy in the entire surroundings of the palace. The queen, who is a frequent rider-out, and whose bright face is familiar to the people of Athens, is very popular. Her name is Olga Constantinowna. She is a Russian princess by birth, and was daughter of the Grand Duke Constantine Nocolaeivitch. She has a good and kindly nature, and her care for the poor, and organizing of various institutions for

their relief, has given her a firm hold on the affection of this capricious people.

George I., King of the Hellenes—for this is what the Greeks still call themselves—was born in 1845, and was the son of the King of Denmark. In 1862 he was appointed king by the three protecting powers—England, France, and Russia. He has held his place much longer than was expected by many. But he is cautious, and his chief talent consists in not overdoing. His wife is regarded as the more gifted. Of officials, such as secretaries, almoners, and the like, there are twenty-five connected with the royal household. The six children have nine tutors and governesses. In addition to the Greek, both French and English are taught the royal children. Little André, however, can speak only Greek, and the queen has added to her local popularity by having him taught, thus far, neither French nor English.

"DRINK DEEP THE SPIRIT OF THE QUIET HILLS."

BY F. W. B.

Drink deep the spirit of the quiet hills !
Teaching they have for our too restless lives.
Could we but fix so fast our restless wills
That softest sun nor storm that maddest drives
Could move us from the unalterable right,
We too might breathe, some holy eventide,
With hearts wide open, that divine delight
To our incessant longings now denied.

PAUL HAMILTON HAYNE.

BY THOMAS WENTWORTH HIGGINSON.

Paul Hamilton Hayne, poet, was born in Charleston, S. C., January 1, 1831. He was the son of Lieutenant Paul Hamilton Hayne of the United States Navy, who died at sea soon after his son's birth; and of Emily (McElhenny) Hayne. He was a nephew of Hon. R. G. Hayne, who was Governor of South Carolina, and long one of her United States senators, but who is best remembered for his debate with Daniel Webster. Another uncle, Colonel Arthur P. Hayne, fought under Jackson at the battle of New Orleans, and was also a United States senator. Paul Hayne was great-grand-nephew of Colonel Isaac Hayne, who was hanged by the British in the Revolutionary War, for having broken his parole; he having been induced to do this, however, because the British commander had endeavored to compel him, while a paroled prisoner, to fight against his own country.

Paul Hayne was fitted for college in his native city, at the school of Mr. Coates, an Englishman of high attainments; and subsequently took the degree of Bachelor of Arts at the College of South Carolina. He seems to have early accepted journalism and literature as his career; edited the Charleston *Literary Gazette* for a time, and was on the staff of the *Daily News* in that city; and he was associated with several friends in establishing *Russell's Magazine*. He doubtless used to the utmost the resources of the Charleston library, a collection which was then stronger in the ancient and English classics than in more recent literature; and there was then in Charleston, more than in perhaps any other Southern city, a wholesome, old-fashioned flavor in respect to literary taste. I remember that it used to be claimed forty years ago that

one might hear more Latin and Greek quoted in Charleston society than anywhere else in America; so that Hayne found himself in an atmosphere not merely of social polish but of very genuine though perhaps narrow cultivation. He was especially indebted to the leading literary man of Charleston, William Gilmore Simms, who used to bring around him the more intellectual young men of that city for literary suppers at a delightful home. To these entertainments Hayne has paid tribute in his poem delivered in Charleston on December 13, 1877, as prologue to a dramatic entertainment in behalf of the Simms Memorial Fund. He there eloquently describes the time

"When round the social board
The impetuous flood-tide poured
Of curbless mirth, and keen sparkling jest
Vanished like wine-foam on its golden crest."
(*Poems, 1882.* p. 316.)

And thus he portrays his host and literary exemplar:—

"His whole air breathes of combat, unserene
Profounds of feeling, by a scornful world
Too early stirred to impotent disdains;
Generous withal; bound by all liberal ties
Of lordly-natured magnanimities;
* * * * *
Blending the mildness of a cordial grace
With sterner traits of his Berserker face
Firm-set as granite, haughty, leonine."
(*Ib. p. 319.*)

Hayne's first book appeared in 1854, but bears the imprint

of 1855. It is a thin volume of poems, comprising only about a hundred pages, dedicated to his wife and published by Ticknor and Fields, Boston. A copy of it, presented by the author to James Russell Lowell, is in the Harvard College library. It was cordially received by the critics; there was a favorable notice in *Graham's Magazine* (Feb. 1855), then high literary authority; and *Allibone's Dictionary* in its second edition (1859) announced that the poems possessed "extraordinary merit" and added, "We are authorized to expect much of Mr. Hayne in the future." A second volume appeared in 1857, "Sonnets and other Poems," dedicated to the poet's mother. A third was published in 1860, entitled, "Avolio, A Legend of the Island of Cos, with Poems, Lyrical, Miscellaneous and Dramatic." This was published by Ticknor and Fields again, and was dedicated to Edwin P. Whipple, with a prefatory sonnet.

In the midst of these literary pursuits he married Miss Mary Middleton Michel of Charleston, the daughter of a French physician resident in Charleston, a man of some eminence, who had received a gold medal from Napoleon the Third for services rendered under the First Napoleon at the battle of Leipsic. All through Hayne's poems appears the evidence of the happiness brought to him by this marriage which was perhaps the one chief felicity of his life. Soon after came the Civil War. Hayne's health had been, from childhood, very delicate; he was unfit for field duty, but wished to enter military service, and became aid on the staff of Governor Pickens of South Carolina, with the rank of colonel. No mention is made by his chief biographer, Mrs. Preston, of any active service; but the war brought to him the great loss of having his house and library burnt during the bombardment of Charleston; and he was left, like so many others in that region, absolutely poor.

In 1866, he took up his residence in a solitary region known as Copse Hill, Georgia, half a mile from a small platform station on the Georgia Railroad, sixteen miles from Augusta. Here he built and occupied a small house of six rooms, a picture of which appears in the volume of his collected poems, but touched with a picturesqueness which could hardly, by the poet's own statement, have belonged to it at first. In his *Memoir of Henry Timrod*, he thus describes that poet's visit to him in his retreat.

"He found me with my family, established in a crazy wooden shanty, dignified as a cottage, near the track of the main Georgia Railroad, and about sixteen miles from Augusta. Our little apology for a dwelling was perched on the top of a hill, over looking in several directions, hundreds of leagues of pine-barren; there were, as yet, neither garden nor enclosure near it, and a wilder, more desolate, and savage-looking home, could hardly have been seen east of the great prairies. Hither, so to speak, had the irruption of war hurled us; for our old residence on the beautiful Carolina coast had been destroyed by fire; the state of our nativity was a blackened, smoking ruin, and we were consequently grateful for any shelter, however lowly, in which it was possible to live at peace and *in freedom!* Human hearts can be as warm in a shanty, with leaking roof and shutterless windows, as in the palace of the doges, and in the enthusiasm of the poet's welcome we strove to make amends for the general poverty of his accommodations, and a very perceptible coarseness of the *cuisine*."—(*Memoir of Timrod*, pp. 54-5.)

There was a small garden attached to the house, but the son of Mr. Hayne expressly says his father had not the physical strength to cultivate it; and that when Mrs. Preston speaks of, "peaches, melons, and strawberries of his own

raising," she does not mean it literally. The fare of the household had that habitual simplicity which marked so many Southern families both before and after the war; being mainly confined, as appears from manuscript letters before me, to bacon, hominy, corn bread and hard-tack. The ungenerous charge made against him by a newspaper biographer,—that even in poverty he lived on luxuries, and had a cellar of choice wines and brandies—is indignantly denied by his son and is absolutely inconsistent with the obvious facts of the case.

His whole life at Copse Hill had the dignity which belongs to patient abstinence from what are commonly esteemed the goods of fortune. This was aided, and indeed rendered possible, by the companionship of the most admirable of wives; nor did wedded love ever have a more noble and unalloyed tribute than in the constant references to her in his poems. The companionship of his only son, too, was doubtless a perpetual delight; and the absence of other children had at least this compensation that it left a smaller load of care on his weak shoulders. He led a life of increasing literary activity, so far as the publication of his poems was concerned, and wrote also prose sketches for the *Riverside Magazine*. He was accurate in all literary engagements, neat and careful in execution and moderate in his demands; I have been permitted to look over many of his letters to editors, and have found them uniformly simple, modest, and honorable.

In this sequestered situation, Hayne lived for the remaining twenty years of his life. In the summer of 1879, however, he made a journey northward; and the literary men of Boston and vicinity still recall with pleasure his eager friendliness and his joy at escaping from the intellectual isolation of his woodland cabin. There appear in his collected poems many verses which seem to have been the result of this visit, addressed to Emerson, Whittier, Longfellow, Stoddard, Stedman, Boker, Taylor, and Fawcett. Toward Bayard Taylor in particular he felt the attraction inspired in a whole circle of young men by that robust and active personality; and Hayne seems to have regarded his poems with a loyal admiration which posterity already seems indisposed to prolong.

During Hayne's residence at Copse Hill his maturer literary work was done. He published in Philadelphia his "Legends and Lyrics," appearing in the autumn of 1871, but bearing imprint 1872. This was dedicated, like his first volume, to his wife, with a prefatory poem. In 1872 (i. e. copyrighted in 1872; no imprint on title-page) appeared his new edition of his friend Henry Timrod's poems, with a memoir in which the editor quotes, with unselfish generosity, the opinion of Northern critics that Timrod was the ablest poet the South had yet produced. This was published in New York, by E. J. Hale and Son, as was Hayne's next volume of verse (1875), "The Mountain and the Lovers, with poems of Nature and Tradition;" this being dedicated to Mrs. Margaret J. Preston of Virginia, whom he describes as being an unseen friend. Issuing seven years later his collected poems, he again sought a publishing house in Boston, but this time a new one, D. Lothrop and Co. These constant changes of publisher indicate with almost unerring certainty that none of his ventures were very profitable; but his last publishers gave him a really munificent edition; nearly four hundred well-printed pages with gilt edges and copiously adorned with not very satisfactory illustrations. To this volume Mrs. Margaret J. Preston contributed a brief, but highly appreciative memoir.

Beside these various publications, Mr. Hayne is understood to have left behind him unpublished sketches of Hon.

R. G. Hayne, Hon. Hugh S. Legaré, and William Gilmore Simms; with many uncollected or unpublished poems which it is now proposed to collect in a volume. His death occurred July 6, 1886.

In putting any critical estimate upon the poetry of Hayne, it will be necessary to dwell upon the circumstances surrounding him, or, as it is now the fashion to say, his environment. It must be remembered, in the first place, that the Southern States of the American Union have never proved very devoted nursing-mothers to their own poets. Not only have these authors usually had to go North for a publisher, but also for readers and fame. It can hardly be doubted that Edward Coate Pinkney of Baltimore was the best lyric poet yet produced in America; his "Picture-Song" and "I Fill this Cup," have that exquisiteness of flavor which is the very rarest gift among our American bards. Yet it is said to be no easy thing to find a copy of his poems in the book-shops of the city in which he dwelt. Compare this with the fidelity of Philadelphia to her one poet Boker; or of New York and Boston even to such *poetae minores* as Drake and Halleck in the one case, Sprague and Pierpont in the other. By far the most gifted of Southern bards, Sidney Lanier, found his biographer and editor at the North through the admirable work of the Rev. W. H. Ward. In view of this general habit of neglect, it is pleasant to remember that Hayne edited the poems of Timrod, and that Mrs. Preston did the same for Hayne.

But there was another way in which the South—or at least the most cultivated of Southern States, South Carolina—unconsciously clipped the wings of her poets. She gave them the traditions of education and good breeding; she gave them a delicious climate, luxuriant vegetation, a polished society and the striking social contrasts of the slavery period; but the one thing that she denied them was a nation. However it may have been in Grecian days, the vast facilities of modern civilization have made it impossible to find the conditions and the inspiration of nationality in a community of less than a million souls, more than half of these being of alien race and servile condition. Yet this was what Hayne, like every faithful adherent of Calhoun in his own state attempted. Even after secession and after the formation of the Southern Confederacy, it is curious to observe that he stoutly refused to recognize that fabric as his nation, it was merely a high political copartnership of wholly independent commonwealths. In his really eloquent appeal to South Carolina at the outset of the war, the other Southern States are but "sister nations," nothing more; the reservation required by the Calhoun doctrines being still made.

"My Mother-land! thou wert the first to fling
Thy virgin flag of freedom to the breeze,
The first to front along thy neighboring seas
The imperious foeman's power;
But long before that hour
While yet in false and vain imaginings
Thy sister nations would not own their foe."

—(*Poems, 1882.* p. 65.)

It is impossible to imagine Irving and Cooper in New York or Longfellow and Whittier in Massachusetts as speaking of their respective states as their nation or of other states as sister nations. Of course patriotism does not grow with the square inch and the mere vehemence of patriotic emotion may sometimes be inversely as the area comprised; but surely the wealth and breadth and volume of a poet's genius must be influenced by the consciousness of belonging to a rich and varied nationality. Much of the scantiness and aridity of our early American literature must undoubtedly be ascribed to the fact that it appeared at a time

when the United States merely meant a strip along the Atlantic shore; and if that strip was insufficient ground for any ample literary product, how much more insufficient the area of any single state! This is no place for discussing any political theories, but it is plain enough that there can be no strong national literature where each little community aims to be a "nation" for itself.

And even beyond this, when we analyze the prevalent sadness that broods over Hayne's poetry, he himself takes pains to point us to the fact that this state which he loved as a nation was itself overshadowed by an oblivion that was largely self-imposed. In a very touching sonnet addressed to his native state and written during the period of reconstruction, it is curious to see that the ills he laments are not merely the bitter and undoubted wrongs of that period, but the neglect into which South Carolina had long since suffered her dead heroes to fall and for which she herself was responsible. This is the sonnet, with part of the accompanying note:

CAROLINA.

"That fair young land which gave me birth is dead!
Lost as a fallen star that quivering dies
Down the pale pathway of autumnal skies,
A vague faint radiance flickering where it fled;
All she hath wrought, all she hath planned or said,
Her golden eloquence, her high emprise
Wrecked, on the languid shore of Lethe lies,
While cold Oblivion veils her piteous head.*
O mother! loved and loveliest! debonair
As some brave queen of antique chivalries.
Thy beauty's blasted like thy desolate coasts;—
Where now thy lustrous form, thy shining hair?
Where thy bright presence, thine imperial eyes?
Lost in dim shadows of the realm of Ghosts!"

If Hayne was thus without the inspiration and stimulus possessed by those poets to whom their whole country was their nation, he suffered also inconceivably from the barrenness of his immediate surroundings. The comfortable Northern author who writes with a public library at his elbow and a mail carrier at the door, can hardly imagine the vast disadvantages under which Hayne's literary work was done. He was sixteen miles from any considerable town and in the nearest town of this character, Augusta, there was no public library. Augusta was also his post office and he was constantly obliged to intrust letters, packages, and proof-sheets to very irresponsible messengers. He was much of the time prostrated by rheumatism and "country fever," and wrote often in pencil and in bed. He could rarely afford to send his boy to school nor was any school within reach. For this he had partial compensation in the more ample companionship of his child; and there are few more delightful poems of fatherly affection than in his verses of different periods entitled "Will" and "Will and I." I am indebted for some valuable co-operation to this son—Mr. William H. Hayne now of Montgomery, Alabama—and it is worth remarking as a proof both of the affection and imagination of the poet, that he wrote a poem called "My

*[NOTE.] "This may be esteemed an *exaggeration*: but really it is the sober and melancholy truth. The fame of the great statesmen and orators, for example, who once flourished in South Carolina, and made her name illustrious from one end of the Union to the other, is fast becoming a mere shadowy tradition. With a single exception, their works have never been collected for publication, nor have their lives been written, unless in the most fragmentary and imperfect fashion. The period during which these things might have been rightly done has forever passed.

Thus, over their genius and performances, as over their native state,—the Carolina of old,—oblivion, day by day, is more darkly gathering. If elements of a new political birth exist in that unfortunate section, they are now hopelessly confused and chaotic!"—(*Poems, 1882.* pp. 153-4.)

Daughter," (Poems, 1882, p. 215.) of such glowing vividness that the reader does not at first glance perceive that it is a wholly ideal being who is described.

In estimating Hayne's permanent worth as a poet, it is impossible not to compare him with other typical Southern poets. He is certainly not the equal of Lanier in shaping imagination, nor of Pinkney in lyric charm; it would be saying a great deal in either case, if he were. When we compare him with his friend Timrod, whose claims Hayne so chivalrously preferred to his own, it is evident that Timrod was the superior in fire, lyric force, and a certain wealth of utterance; and Hayne in sweetness, dignity, and self-control. There is a sense of color, as if caught from Keats or Tennyson, where Timrod sings in the first verse of his "serenade":—

" Hide, happy damask, from the stars,
What sleep enfolds behind your veil,
But open to the fairy cars
On which the dreams of midnight sail;
And let the zephyrs rise and fall
About her in the curtained gloom,
And then return to tell me all
The silken secrets of the room."

—(*Timrod*, p. 85.)

Timrod's war songs, on the other hand, have far more of the Berserker ring than is to be found in Hayne's. This is seen for instance in the strong poem of "Carolina" of which Hayne himself wrote that its lines were "destined perhaps to outlive the political vitality of the state whose antique fame they celebrate" (Timrod, p. 381.). But Hayne's was certainly the higher nature; when his songs were most nearly red-hot, they did not, like Timrod's, call the Union armies Goths and Huns, and they were free from the almost brutal tone of wrath and revenge with which Timrod rejoices over the imagined desolation of New York.

* * * "Strike with us! till the Goth shall cling
To his own blasted altar-stones, and crave
Mercy; and we shall grant it, and dictate
The lenient future of his fate
There, where some rotting ships and crumbling quays
Shall one day mark the Port which ruled the Western
seas."

—(*Timrod*, p. 131.)

This greater fineness of temperament undoubtedly helped Hayne's later career; it made it easy for him to strike hands with old foes; and nothing can be more generous or impassioned than his verses of thanks for the Northern aid given at a later time to the Southern cities.

His longer poems are, like the longer poems of most bards, unsuccessful; and the reader turns gladly from these to his verses upon the two themes where he is strong—home affections and the enjoyments derived from external nature. The beauty and delicate tenderness of the former have been already mentioned; and the outdoor poems have the merit of using material unhackneyed and often untouched. It is difficult for a Northern poet to do full justice to the tremulous sweetness, the dewy charm of the Southern nights and mornings; the delicate light that rests upon the rivers, the clear transmission of far-off echoes through the air. All this atmosphere is to be found in Hayne; and in those points which make the difference between the Northern and Southern aspect of nature, he is uniformly truthful and accurate. Thus a Northern poet writing of the white water-lily would make most prominent in his description the exquisite fragrance from which it takes its specific name (*Nymphaea odorata*); but as in the large and beautiful water-lilies of Georgia and South Carolina, this odor is almost

wanting, Hayne omits its mention altogether, as he should.

But above all special merits of description, there is in these outdoor poems a charm which comes from a certain wild note, something akin to the delicate song of the bluebird and to all soft spring scents; the expression of a lonely life amidst virgin woods and unspoiled solitudes. One may detect something of the same note in some of Bryant's earlier poems; but in Hayne it is softer, richer, sweeter. Yet it too often comes in separate snatches only; so that the following sonnet, though not one of his profoundest, is one of his most finished strains:

OCTOBER.

The passionate summer 's dead! the sky 's aglow
With roseate flushes of matured desire,
The winds at eve are musical and low,
As sweeping chords of a lamenting lyre,
Far up among the pillared clouds of fire,
Whose pomp of strange procession upward rolls,
With gorgeous blazonry of pictured scrolls,
To celebrate the summer's past renown;
Ah, me! how regally the heavens look down,
O'ershadowing beautiful autumnal woods
And harvest fields with hoarded increase brown,
And deep-toned majesty of golden floods,
That raise their solemn dirges to the sky,
To swell the purple pomp that floateth by.

—(*Poems, 1882*, p. 25.)

Whether a life of wider experience would have given more range to his verse, it is impossible to say; but he has in at least one case shown a remarkable power in going beyond himself and grasping with strong poetic insight a nature alien to his own. This is in a poem called "The Snow-Messengers" in which he portrays Longfellow and Whittier, as seen during his brief Northern visit in 1879. For him to describe Longfellow was no severe test; they had much in common, and the traits of the genial Cambridge poet were not hard to portray; but with Whittier the case was very different. Yet among all the attempts to describe the personal bearing of that unique and now venerable figure in our literature, there has been none quite so good as this, coming from the shy, sensitive, passionate South Carolinian.

"So, 'neath the Quaker-poet's tranquil roof,
From all dull discords of the world aloof,
I sit once more, and measured converse hold
With him whose nobler thoughts are rhythmic gold;

See his deep brows half puckered in a knot
O'er some hard problem of our mortal lot,
Or a dream, soft as May winds of the South,
Waft a girl's sweetness round his firm-set mouth.

Or should he deem wrong threats the public weal,
Lo! the whole man seems girt with flashing steel;
His glance a sword-thrust, and his words of ire
Like thunder-tones from some old prophet's lyre.

Or by the hearth-stone when the day is done,
Mark, swiftly launched, a sudden shaft of fun;
The short quick laugh, the smartly smitten knees,
And all sure tokens of a mind at ease.

Discerning which, by some mysterious law,
Near to his seat two household favorites draw,
Till on her master's shoulders, sly and sleek,
Grimalkin, mounting, nibs his furrowed cheek;

While terrier Dick, denied all words to rail,
Snarls as he shakes a short protesting tail,

OUTLINE AND PROGRAMS.

But with shrewd eyes says, plain as plain can be,
'Drop that sly cat. I'm worthier far than she.'

And he who loves all lowliest lives to please,
Conciliates soon his dumb Diogenes,
Who in return his garment nips with care,
And drags the poet out, to take the air.

God's innocent pensioners in the woodlands dim,
The fields and pastures, know and trust in him;
And in *their* love his lonely heart is blessed,
Our pure, hale-minded Cowper of the West!"

—(*Poems, 1882, pp. 291-2.*)

But above all qualities of worldly success or even literary genius, stands the dignity of personal character, and it is here, after all, that Hayne was strongest. "A little integrity," says his favorite Emerson, "is better than any

career." To have struggled from boyhood for a literary life —a career difficult in Hayne's youth for any American and especially hard where his lot was cast;—to find by conviction one's nationality in one small state, and to see that state risk all on the arbitrament of war, and lose;—then to dwell for twenty years outside of that beloved state in solitude and poverty;—to make of one's muse, not so much a glory and a joy, as a means of keeping the wolf from the door, and debt at a distance;—all this constitutes a life-long ordeal which might justify or at least extenuate some note of complaint, some tinge of personal repining. For a man to have died after this and left behind him no trace of such weakness throughout his many pages of verse, this is to have achieved a crown of manliness more noble than any flights of song. This glory, and nothing less than this, is Hayne's.

OUTLINE AND PROGRAMS.

OUTLINE OF REQUIRED READINGS FOR JANUARY.

First Week (ending January 8).

1. "The Christian Religion," from page 3 to page 30.
2. "Warren Hastings," from page 3 to page 50.
3. "Journalism." THE CHAUTAUQUAN.
4. Sunday Reading for January 2. THE CHAUTAUQUAN.

Second Week (ending January 15).

1. "The Christian Religion," from page 30 to page 60.
2. "Warren Hastings," from page 50 to page 96.
3. "The Universal Color Maker." THE CHAUTAUQUAN.
4. Sunday Reading for January 9. THE CHAUTAUQUAN.

Third Week (ending January 22).

1. "The Christian Religion," from page 60 to page 90.
2. "Warren Hastings," from page 96 to page 147.
3. "Studies of Mountains." THE CHAUTAUQUAN.
4. Sunday Reading for January 16. THE CHAUTAUQUAN.

Fourth Week (ending January 31).

1. "The Christian Religion," from page 90 to page 115.
2. "Warren Hastings," from page 147 to page 184.
3. "Out-of-Door Employments for Women." THE CHAUTAUQUAN.
4. Sunday Reading for January 23 and 30. THE CHAUTAUQUAN.

SUGGESTIVE PROGRAMS FOR LOCAL CIRCLE WORK.

FIRST WEEK IN JANUARY.

1. Roll Call—Quotations about the New Year.
2. The Lesson.
3. Map Exercise—Study of India.
4. Paper—History of East India Company.
Music.
5. Table Talk—The Wars between England and Scotland.
6. Reading—"The Heart of Bruce." By Aytoun.
7. Essay—New Year's Customs, Ancient and Modern.
8. Game—Transpositions. Each person is to write upon a slip of paper the name of a character in English history, transposing the letters so that it will be difficult to recognize it. A few words of explanation must be attached, telling when the person lived, for what noted, or any bit of information which the writer desires. The papers are then to be folded, gathered, thoroughly shuffled, and distributed. Each one is to make out the name on his slip. The following will serve as an example:—

Clerk Capbin. The son of a wise and powerful king; the father of a weak and indolent king. He was never king himself; but in a famous battle, he conquered a king and made him prisoner.

SECOND WEEK IN JANUARY.

1. Roll Call—A written question for the Question Box.
2. The Lesson.
3. Sketch—Robert Clive.
4. Paper—The Stoicks and the Epicureans.
Music.
5. Table Talk—The Wars of the Roses.
6. Story—Joan of Arc.
7. King Richard III. as shown in Shakspere's play "Richard III."
8. Experiments described in the article "The Universal Color Maker."

THIRD WEEK IN JANUARY.

As the 128th anniversary of Robert Burns is to be celebrated January 25, we have adapted a large part of this program to that occasion.

1. Roll Call—Quotations about Burns.
2. The Lesson.
3. Paper—History of India since Hastings' Time.
4. Selections—"The Pipes at Lucknow," by Whittier; "The Relief of Lucknow," by Robert T. S. Lowell; and "The Defence of Lucknow," by Tennyson.
Music.
5. Sketch—Robert Burns.
6. Recitation—"For a' That and a' That." By Burns.
7. Study—"The Cotter's Saturday Night."
8. Game—The Critics. Each one in the company is to write upon a slip of paper the name of some book mentioned in "Outline Sketches of English Literature," and fold the paper down so as to entirely conceal the writing. Each paper must then be passed to the person at the left, who is to write below the fold, the name of a second book, fold down the paper again, and again pass to the left. The name of an author is written this time, folded, and passed. Next comes a motto, and then, two opinions of the press (by different writers of course), accredited to some paper. Some such result as given below may be expected:—

"Canterbury Tales," or "The Rise and Fall of the Roman Empire." By George Eliot. "Brevity is the soul of wit." "A charming little book well adapted for chil-

dren." *New York Graphic*. "A work of no lasting merit; trashy in character; epigrammatic in style." *Penny Post*.

FOURTH WEEK IN JANUARY.

1. Roll Call—Question Box answers, (the questions having been distributed at the previous meeting).
2. The Lesson.
3. Paper—The Life and Times of Sir Walter Raleigh.
4. Book Review—"Kenilworth." By Sir Walter Scott. Music.
5. Sketch—William Pitt.
6. Sketch—Edmund Burke.
7. Debate—Resolved that the acquittal of Warren Hastings was not in accordance with the principles of justice.
8. Decision of judges on the merits of the question.

A good plan for local circles to adopt would be that of holding a reception on New Year's day. To be recognized as an organization, and to gain the good will of the community go far toward the making of any undertaking a success. And no better occasion for obtaining such a result could offer itself than this holiday and the ob-

servance of this time-honored custom. Beside the personal and local advantage gained, a more general interest in the C. L. S. C. work might be awakened and its influence extended.

Another opportunity for all circles that believe in making the most of Memorial occasions, is that of holding a "watch night meeting." In the great scrap-book in which we preserve all the programs sent to this office and on which we draw largely for the suggestive weekly programs, we find the following carried out by the circle in Berkeley, California, on the evening of December 31, 1885.

Program.—Opening Remarks. Chautauqua Song. Original Poem. Music. Select Reading.

Essay—Watch Meeting Customs.

Recitation—"The Death of the Old Year."

Tableau—The Old Year and the New Year.

Social Amusements.

Refreshments.

11:45 p. m.—Devotional Exercises.

Song. Remarks. Prayer.

Recitation—"Ring Out Wild Bells."

Response by the Bell.

HAPPY NEW YEAR TO ALL.

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"We Study the Word and the Works of God."—"Let us Keep Our Heavenly Father in the Midst."—"Never Be Discouraged."

C. L. S. C. MEMORIAL DAYS.

1. OPENING DAY—October 1.
2. BRYANT DAY—November 3.
3. SPECIAL SUNDAY—November, second Sunday.
4. MILTON DAY—December 9.
5. COLLEGE DAY—January, last Thursday.
6. SPECIAL SUNDAY—February, second Sunday.
7. FOUNDER'S DAY—February 23.
8. LONGFELLOW DAY—February 27.
9. SHAKSPERE DAY—April 23.
10. ADDISON DAY—May 1.
11. SPECIAL SUNDAY—May, second Sunday.
12. SPECIAL SUNDAY—July, second Sunday.
13. INAUGURATION DAY—August, first Saturday after first Tuesday; anniversary of C. L. S. C. at Chautauqua.
14. ST. PAUL'S DAY—August, second Saturday after first Tuesday; anniversary of the dedication of St. Paul's Grove at Chautauqua.
15. COMMENCEMENT DAY—August, third Tuesday.
16. GARFIELD DAY—September 19.

NEW YEAR'S GREETINGS to Local Circles everywhere and a serious word to Local Circle members. A circle will never be better than its individual members; if they are second class in attention, interest, attendance, and performance, the circle will be a second-class affair. A model circle means model members. The model member, in the Scribe's opinion, respects his circle; certainly he must do so if he wishes any one else to respect it. He knows that no one is so uninteresting as he who is not interested, and he pays attention to every subject taken up. Enthusiasm he long ago learned to be the most powerful of all motors, and he accepts its aid. Nine times out of ten he is not brilliant, but he can be steadfast, and he consoles himself with the story of the tortoise and the hare. If his performances are not satisfactory to himself, he knows they will never be better unless he begins by doing his best. Loyalty to his circle forbids detracting from its reputation by leaving any number on its programs vacant, and his honesty admonishes him that he ought not to carry away ideas when he has contributed none. The best investment to be made for mental capital, he has discovered to be in conversation, and he takes his turn in debates, general discussions, round tables, and questions. Above all he never forgets that every "feast of reason" is

made enjoyable by its "flow of soul," and he cultivates good fellowship. To be a model circle member is an excellent resolution for New Year's Day.

NOTES FROM ABROAD.

Chancellor Vincent is carrying the C. L. S. C. banner not only into new countries, but planting it to stay in lands where it has already been unfurled. From PARIS, FRANCE, he writes: "The C. L. S. C. work is developing in Europe."

Mr. Donald Cook, the Scottish secretary of the C. L. S. C., writes us in a letter dated November 18:

"I have to acknowledge receipt of two hundred copies of THE CHAUTAUQUAN for October. I have sent one hundred of them to a bookseller in Edinburgh, who has agreed to send them to quarters where they are likely to do good. The remaining one hundred, I am disposing of to the best of my knowledge, circulating them in the neighborhood and elsewhere—a few being sent to London. The circular being distributed here is practically an enlarged edition of the Chautauqua popular educational circular about the C. L. S. C. We have sent off fifteen hundred copies this week. I think England will take separate action ere long."

The vigorous presentation of the cause in SANTIAGO, CHILI, by Mr. Allis, reported in the December issue, has

LOCAL CIRCLES.

taken effect. Eight copies of THE CHAUTAUQUAN are going to Santiago. Mr. Allis writes :

"I have given a lecture on Chautauqua here, (SANTIAGO) and repeated it in VALPARAISO. The English speaking part of these two cities hails from 'hold Hingland,' so they look askance at anything Yankee. You would laugh at the absurd objections which I heard against Chautauqua. In the second lecture I took pains to answer them, more to show their vapid nature than anything else, and summed up the whole with a quotation from Josh Billings, 'It's no use tu argu agin a success.'"

Two points in the Chautauqua work of SOUTH AFRICA might be wisely tried in the United States. In a letter from Miss M. E. Campbell, the Chautauqua missionary of that country, she says, "The Rev. Mr. Rider, now of Aberdeen, gives lectures upon the 'Chautauqua Movement' in several places in the eastern provinces this month;" and again, "At BEAUFORT WEST the four members are now meeting every other day to question each other upon the readings."

Over twenty members from foreign countries have been enrolled in the Class of '90. The countries represented are JAPAN, WEST INDIES, ENGLAND, SCOTLAND, INDIA, AUSTRALIA, HAWAIIAN ISLANDS, GERMANY, and RUSSIA.

THE QUESTION TABLE IN LOCAL CIRCLES.

The new department introduced into THE CHAUTAUQUAN in the April issue of Volume VI. is becoming a valuable help in Local Circles. The *Table* is used in various ways: many Circles take a vote on the "Opinions" at their meetings and send us reports; others select a particular set of questions and require it to be answered; the questions on "The World of To-day" are sometimes used as the basis for a table talk; the pronunciation tests are also found an agreeable variety in an evening's program. We have received many kind words from Chautauquans expressing their appreciation of the department. If circles will send us an account of the way in which they use the *Table* we shall be glad to notice them in *Local Circles*.

We have received votes on the "Opinions" and answers to one or more sets of questions from Sunrise Circle, MOUNT LEBANON, NEW YORK, the circles at BROOKVILLE, PENNSYLVANIA, FRANKLIN, OHIO, WESTFIELD, WISCONSIN, the Spiral of SAN FRANCISCO, CALIFORNIA, the Winchell of TIFFIN, OHIO, the No Name Club of LEXINGTON, MASSACHUSETTS, and the circle at HEMPSTEAD, NEW YORK.

HOW TO CONDUCT LOCAL CIRCLES.

The suggestion offered by THE CHAUTAUQUAN for October that new circles should send for Mr. A. M. Martin's pamphlet on "Local Circles; How to Conduct Them," has been very generally adopted. The large majority of letters from new circles ask for copies of the work. This handbook can be had, free of charge, on application to the C. L. S. C. Office, Plainfield, New Jersey. It should be in the hands of every leader of a circle.

REORGANIZED CIRCLES.

"The C. L. S. C. is booming in LONDON," so writes the secretary of the London, Canada, Central Circle. Nineteen members have entered ranks, eight of them are in the Class of '90. A new circle of twenty-five has appeared in LONDON SOUTH. — The Granite of BLOOMFIELD, ONTARIO, is at work. The circle did a loyal thing when it adopted stationery with an appropriate heading. The motto, "knowledge is power," and the name of the circle are used as a letter-head. These little marks show the spirit.

The AUBURN, MAINE, Chautauquans led a brilliant undergraduate career, and the Society of the Hall in the Grove they are sustaining, is keeping up the standard. At a recent meeting the program included a talk on New York authors, a sketch of Addison and his works, a talk on his

characteristics with descriptions of his early home, and readings from his writings.

RUTLAND, VERMONT.—"Our circle has reorganized and bids fair to be larger than any previous year."

The Ashmeads of SWANZEY, NEW HAMPSHIRE, have added a few names to the circle and are finding all things favorable for good work.

The circle of WINTER HILL, SOMERVILLE, and vicinity, BOSTON, MASSACHUSETTS, organized last year, begins its second year under very favorable auspices. Its membership formerly numbering twenty-six has been increased to thirty-three, with enough more applications to bring the number up to the limit as set forth in the constitution. The class includes some of the oldest and best known residents of the Hill, and the season before it, promises to be one of great benefit. — That the Alden Circle of METHUEN has profited by its "Walks and Talks in the Geological Field" what further proof is needed than this report: "We greet you not as a new circle, but one which has had a happy existence for three years, firmly established upon a solid basis of Plymouth Rocks, with now an upper stratum largely conglomerate. The attrition of care and other interests have carried away part of our original base, but annual deposits have more than made good the loss—in bulk at least. We are entering upon the year's work with much interest, hold fortnightly meetings, and in our reading follow the prescribed program as nearly as possible." — The Automath Circle of NEW BEDFORD began the year with the best of indications. A local paper speaking of the second regular meeting of the year says, "This circle is to be congratulated upon having secured the assistance of several practical educators for the present year's course of study. Such work as is proposed by this circle cannot fail to realize in a high degree the excellent results contemplated in the Chautauqua idea of popular education." — The SALENA Chautauquans are fortunate in having graduates who are alive to the advantage of standing by the circle. Two who went "under the arches" at Lake View last summer, are regularly enrolled in the circle this year. Such is the genuine Chautauqua idea.

Our Circle of WEST WINSTED, CONNECTICUT, started on the year's work "alive and in earnest." Its members are hard workers outside the circle, yet are always glad to be on hand. — At HARTFORD the circles united in securing an able lecturer to present the cause of Chautauqua. The effect was doubled by having the address reported in full in a city paper. — The Dunn Browne Circle of MADISON, if smaller, is not disheartened, but hopes for "a happy time to come when many will join us." — The Pond Lilies of WOODBRIDGE have spread their petals again. The Lilies are not so numerous in Woodbridge as last year.

The third year of the Aryan Circle of HOPE VALLEY, RHODE ISLAND, began auspiciously. There is a lively interest in things Chautauquan in the town.

In BROOKLYN, NEW YORK, the De Kalb Circle has reorganized with a fuller membership than ever. This is the fourth year for most of the members, and there is anticipation of a pleasant winter. — The Enodia Circle of POUGHKEEPSIE is in a very flourishing condition. Poughkeepsie boasts of a large number of Chautauquans who combine in circles of twos and threes. The Enodia has five members, three of whom are graduates in the last class. The circle is very thorough in the readings, using a dictionary and cyclopedia unsparingly; a hammer has been added to the equipment this year for use in "Walks and Talks." The secretary expresses a wish in a recent letter in which we heartily join, that "Wallace Bruce had time to lead all the Chautau-

quans of the city once a month in a meeting."—The first monthly meeting of the year of the Vincent at TROY was announced to the members by a postal bearing a timely and well-arranged program with these suggestions appended:

"We hope that all the recent graduates will continue in the membership of the circle, and that many of them will pursue several courses of reading. Send the President, at once, questions and other matter for the Round Table. We desire to make this a conversation to be participated in by all."—Eighteen members this year in the circle at EAST NORWICH.—PINE PLAINS is at work.—The Emerson Circle of CRAWFORD, NEW YORK, has organized for its second winter's work with twenty-five members. No one but members of the Central Circle can belong to the Emerson.—POTSDAM, long famous among geologists, is the home of the Laurentian Circle. Last year there were thirty members in the circle, now there are forty-five. May it endure like the rocks!—"We have begun our second year with nearly all our former members and several new ones," writes the Danforth of SYRACUSE.—The ring of enthusiasm never fails in a BROCTON report:—"Our class numbers twenty-seven with enthusiasm enough for forty. We have had an average attendance of twenty even in the very busiest season when every man and woman was busy picking and packing grapes."—Under the shadow of Mt. Beacon, and taking its name from that grand old mount of Revolutionary fame, is a circle of eighteen members. MATTEWAN is the home of the Beacon Circle. It is larger by five members than last year. A monthly public meeting is one good reason for the growth.

GOSHEN, NEW JERSEY:—"Our circle is flourishing as never before."—The ten members in the Round Table Circle of JERSEY CITY have increased their number to thirty-five. Principal Hurlbut has been lecturing under the auspices of the Chautauquans of Jersey City and Hoboken.—The Chautauquans of OCEAN GROVE resumed work in October.

Three PHILADELPHIA Circles report reorganization, the Walnut Street, Broadbent (sixteen members), and the Jefferson (twenty-one members). The last named has adopted the Chautauqua songs to use in its exercises.—REYNOLDSVILLE'S Mountain Pink announces an increased membership. Two graduates do their duty and remain in the circle.—The PITTSBURGH Central Circle has always employed ingenious methods of gathering in the people to its monthly meetings. This was tried in the fall, a printed slip was sent to pastors of different churches, bearing the following request and invitation:

"In the interest of popular education we request you to make the following announcement, with such words of commendation as you may feel warranted in making. Please consider yourself specially invited.

This congregation is cordially invited to attend the second monthly meeting, for the season, of the Pittsburgh Central Chautauqua Literary and Scientific Circle, at the Y. M. C. A. Chapel, on Thursday evening, November 4th, at 7:30 o'clock. The exercises will consist of the Chautauqua Vesper Service, short addresses, select readings, and choice music."

—Clelia Circle of SELINGROVE is comprised of twenty-seven determined, persevering workers who meet semi-monthly, under an able leader. The circle does solid and conscientious work.—At LEHIGHTON the Aryan Circle started in October with twenty-nine members with the promise of many more, and an expectation of accomplishing great things.—The ELIZABETH Circle organized last fall for the fourth year's work. The interest is reported to be as strong as ever.—The secretary of the Bryant of

CHAMBERSBURG writes, "We reorganized in September for the purpose of being in working order by the first of October. Our circle is in a very flourishing condition. Our meetings increased in interest last year and we are anticipating profit from this winter's readings. We have taken in eleven new members. We find it best for members to register at the Central Office as they take more interest in the readings than those who do not register. We fine members who do not perform the part of the program assigned them."—A valuable exercise employed in the circle at LANCASTER is calling upon the members for the thoughts and impressions suggested by reading a certain portion of a book.

The Antietam of HAGERSTOWN, MARYLAND, announces itself as very much in earnest in its readings and studies and even more enthusiastic now than in the first year.

There are some zealous Chautauquans in WHEELING, WEST VIRGINIA. The way they work is illustrated by the following. One of them hearing by chance of a lady in Indiana who wanted to know "how to be a C. L. S. C." immediately sent her circulars and then sent her address to Plainfield that she might be besieged from that point at the same time.—May what has happened at PARKERSBURG happen everywhere, that the homes of the members have become too small to hold the Circle and a new organization is a necessity.

The circle at FINDLAY, OHIO, sends us data in regard to the natural gas wells in that vicinity, which will be interesting to the readers of "Walks and Talks."

"On pages 143-4, in 'Walks and Talks in the Geological Field,' Prof. Winchell states that Fremont, in Northwestern Ohio, is the place where quantities of natural gas have been discovered. The largest flow from wells at Fremont is only about seventeen thousand cubic feet daily. This, in these days of gas discoveries, can scarcely be called a gas well. A well of this kind has been in operation in Findlay, Ohio, since 1838, and is, therefore, not a late discovery of natural gas. It was not until November, 1884, when a deep well (1092 feet) was drilled in this city, that natural gas was found in sufficient quantity in Ohio to be of much practical value; since the drilling of this well a number of others (twenty) have been put down with yet more decided success. The largest of these being the Karg well, which, by measurement, has a capacity of thirteen million cubic feet daily, with not the slightest diminution in pressure up to the present time (ten months after the drilling). High pressure gas in large quantities is found in the Trenton rock at a depth varying from about one thousand one hundred forty-four to one thousand six hundred forty-eight feet from the surface of the ground. Surface gas is also found at various depths, especially six hundred to seven hundred or seven hundred fifty feet from the surface. The pressure at the surface in some of the wells in Findlay reaches nearly four hundred pounds to the square inch, with a lateral, or expanding pressure at the side of the pipe, when open and the gas allowed to pass out freely, of about one hundred fifty pounds to the square inch. When we take into consideration that only about eight ounces pressure can be allowed on lines used for heating and lighting in dwelling houses it can readily be seen what a vast surplus there is held in reserve. When in addition to this we remember the large number of wells in the city (though some have not so large a flow, nor so high pressure), the amount of gas already at command, compared with that at Fremont, is certainly surprisingly large."

—The ATHENS Circle is larger by five members this year: twenty-seven in all are enrolled. The program includes a wonderful variety of pleasing exercises.—The HOCKINGPORT members have been studying geology with great zeal and interest. One meeting was turned into a geological excursion to search for the neighborhood rocks.

—SYLVANIA's class sends word that it knows no such

word as fail and is diligently making the most of the time.

Elaborate and delightful arrangements of the year's course have been prepared by the Bryant and Vincent of TERRE HAUTE, INDIANA. Both circles are large, the former numbering fifty-seven, the latter forty-four. That each member may know beforehand the work for a particular evening, a scheme is printed covering the entire year, and including the name of leader, the lesson, and subject of special study. The Memorial Days are all provided for, committees being appointed to perfect arrangements. The plan is admirable for a large circle.

—A third circle of twenty members has been reorganized in TERRE HAUTE. Name unknown. —A spirited letter from GREENSBURGH says, "Our circle begins its fifth year with a promising outlook. Our old circle was composed mostly of '86's, and like true Progressives, we are nearly all reading with the circle this year. A lively interest is shown by our new members. We are going to try and make our class second to none in South Eastern Indiana." —A class of about sixty members is the Argonauts of NOBLESVILLE. The meetings are largely of a social character. —QUINCY has had a Chautauqua boom. The Chautauquans called a meeting October 6, which resulted in the formation of a circle of twenty-one members, in the Baptist Church, and of a circle of the Y. M. C. A. The latter invited all the circles of the city to unite in the celebration of Bryant's Day, and to listen to a lecture on geology. The meeting was a grand success.

The Pansy Circle of MOLINE, ILLINOIS, has entered the work of the year with redoubled energy. It has but twelve members, just enough to carry out the Programs suggested in THE CHAUTAUQUAN. The drawing of historical pictures at a recent meeting brought out a versatility of talent. The Capture of Quebec, The Boston Tea Party, Rescue of Capt. Smith by Pocahontas, and The Chicago Fire, deserve special mention. To fill in the social part of the meetings the Chautauqua games are found to be just the thing. —The twenty people associated in the Themis of ASTORIA are doing excellent work. They took their geologies under their arms not long ago and drove to the Illinois River not far away to geologize; what they found they do not tell. Why would it not be fair for circles to report the bits of information they pick up, to *Local Circles*, for the good of us all? Our Findlay classmates do this in the present issue and a member of the STILLWATER, MINNESOTA, Circle, informs us of the finding by the circle of a layer of oölitic formation in the neighborhood. This circle is planning a hunt after fossils in the Trenton limestones in the vicinity of Minneapolis in the Spring. —An enthusiastic worker at EVANSTON sees a wonderful promise for the circle there. She says, "Everybody is so full of Chautauqua that I expect soon infants will cry for the idea. At our last meeting two hundred were present."

The LOUISVILLE, KENTUCKY, Circle is in its fourth year. Several diplomas go to this circle next Recognition Day.

CHELSEA, MICHIGAN, has organized with fifteen members. —The Circle of the Oaks at FLINT has reorganized.

—The first organization in YPSILANTI is larger than ever, this year, its third. A new circle was formed there a year ago and two are reported to be forthcoming this season.

—Principal Hurlbut has been doing good work for the north-west. At BLACK RIVER, WISCONSIN, the circle had nearly lost heart when Dr. Hurlbut appeared and so revived the people that they again have gone to work. —The membership of last year in the First RACINE Circle is much more than doubled. They now have forty-eight members, and others are coming soon. The sentiment

of the entire circle was expressed recently by a member of the Class of '90: "I think the readings are splendid, and wouldn't give them up for anything." —A circle secretary in MILWAUKEE writes: "We are going to have a grand circle this year, have new members, and a splendid president." —Twenty enrolled at OSHKOSH. —The Pioneers of MARSHFIELD are ten in number. The programs in THE CHAUTAUQUAN are made the base of their work. —A second set of Pioneers are studying at VIROQUA. There are nine of them, now in their second year. —An astonishing increase has taken place in BEAR VALLEY. The circle has multiplied itself by four; last year it had four members, now it has sixteen.

Several readers have been gained for the Class of '90 by the Rollingstone Circle of MINNESOTA CITY.

Bryant Circle, MASON CITY, IOWA, enrolls eleven members.

We had supposed from the large number of Recognition Day services reported that we had included all, but here is still another. A letter from YANKTON, DAKOTA, gives an account of it:

"The Yankton Circle has kept on the even tenor of its way for four years, the members quietly enjoying the readings. Three of them having completed the course, we felt that it was time for a public recognition of Chautauqua by a Yankton audience, but more especially did we desire our *alma mater* to receive kindly greetings from the institution of learning in our midst. Accordingly we planned for a Recognition Service which was held on September 28. There was a formal program including addresses, papers, songs, and a presentation of diplomas, by Dr. Ward, president of Yankton College, who gave Chautauqua a grand recognition. After the services were ended, an opportunity was given to join the circle and fifteen names were taken."

The Wattie Stone Circle, (twenty members), WARRENSBURGH, MISSOURI, has been reorganized and is doing the prescribed studying with a will.

The Grecian Circle of PARSONS, KANSAS, starts out with a membership of about thirty. —Twenty-three new members have re-enforced the Adams Circle of TOPEKA; there were twenty enrolled last year. The election of an instructor for the year to do weekly reviewing is a feature. Ottawa Assemby had a very healthy effect on the loyalty and determination of the Adams.

A very pleasant feature of the Bryant Memorial at LINCOLN, NEBRASKA, was the responsive reading of selections from Bryant in the opening exercises, here given.

Leader—Go forth under the open sky

Class—And list to Nature's teachings.

L.—The groves were God's first temples.

C.—Grandeur, strength, and grace are here to speak of Thee.

L.—Written on thy works,

C.—I read the lesson of thy own eternity.

L.—Thou, Lord, dost hold the thunder,

C.—And the firm land tosses in billows when it feels Thy hand.

L.—Eternal Love doth keep in his complacent arms,

C.—The earth, the air, the deep.

L.—Thou dost look on thy creation,

C.—And pronounce it good.

L.—While yet thy days are long, and this fair change of seasons passes slow,

C.—Gather and treasure up the good they yield,

L.—All that they teach of virtue,

C.—Of pure thoughts and kind affections,

L.—Reverence for thy God,

C.—And for thy brethren.

L.—So, when thou shalt come into these barren years,

C.—Thou may'st not bring a mind unfurnished, and a withered heart.

L.—Look on this beautiful world,

C.—And read the truth in her fair page.

L.—Be it ours to learn to conform the order of our lives,

C.—To the beautiful order of Thy works.

All.—So live, that when thy summons comes to join

The innumerable caravan which moves
To that mysterious realm where each shall take
His chamber in the silent halls of death,
Thou go not like the quarry-slave at night,
Scourged to his dungeon; but sustained and soothed
By an unfaltering trust, approach thy grave
Like one who wraps the drapery of his couch
About him, and lies down to pleasant dreams.

NEW CIRCLES IN NEW ENGLAND.

There are twenty-five circles reported this month from the New England States. Six of these are in MAINE. Those at SACO and SABATTUS have each seven members; at DEXTER, eight; PATTEN, fifteen; LISBON FALLS, twenty-five. The president of the Ocean Circle at KENNEBUNK PORT writes, "We feel that the C. L. S. C. will aid us in solving the difficult problem—what shall be our village life during the long evenings of the winter."

NEW HAMPSHIRE has two circles: one at NORTHWOOD RIDGE, with a membership of seven; the other at HUDSON has eight members.

VERMONT sends names from four towns. SOUTH STAFFORD has organized a circle with nine members, MIDDLE-TOWN SPRINGS, one with ten, JOHNSON, with twelve, and NORTH BENNINGTON, eighteen.

CONNECTICUT sends the same number as Vermont. The circle at RIDGEFIELD has eleven members; LITCHFIELD, twenty; EAST BERLIN, twenty-five; and the DELPHI at TAFTVILLE, thirty.

A letter from LONSDALE, RHODE ISLAND, says, "A circle here starts with a membership of fifteen, and a very good prospect of as many more in a short time."

MASSACHUSETTS is the banner state of New England in this month's report, having eight new circles. The SWANSEA circle has seven members; SOUTH WILLIAMSTOWN, LYNN, and WEYMOUTH have twelve each; BARRE begins with fifteen but is working for twenty-five; the circle at DORCHESTER has twenty names enrolled; the Haven and Pearson Circles of EAST BOSTON have already attained a large membership; and TOWNSEND heads the list with thirty-six new names.

THE SOUTHERN STATES.

It is pleasing to hear of the rapid growth of the C. L. S. C. among our friends of the South. From FALLSTOWN, MARYLAND a lady writes, "I have been reading two years alone, and could not inspire any one to join me until now. Our circle will be small, but we hope to do good and thorough work."—In CAMBRIDGE, the Carlisle Circle numbers thirty-four.

The NORFOLK Circle, VIRGINIA, has nine members, and one at MT. VERNON begins with about fifty.

WHEELING, WEST VIRGINIA, has a circle of nine.

At WINCHESTER, KENTUCKY, a circle has been formed.

Two circles, one with four, and the other with eight members, are beginning to study in BEAUFORT, SOUTH CAROLINA.—The Home Readers of BRAMBERG, say, "We are seven."—The Carlisle Circle of GREENVILLE, is named in honor of our counselor from South Carolina. Their motto is "*Vivamus ut ediscamus.*"

Eleven in the new circle of CARTERSVILLE, GEORGIA.

The First Auxiliary Circle of TAMPA, FLORIDA, sends a D-Jan

favorable report.—A new circle formed in JACKSONVILLE has been the means of stimulating to renewed efforts those who had fallen behind in the work.

In LIVINGSTON, ALABAMA, two young ladies have organized a circle, enrolling eighteen names at the first meeting.

—The Y. M. C. A. of NEW ORLEANS, has a circle of fourteen in connection with the association.

Seven more circles in TEXAS. Two of these are in CORICANA.—The secretary from TRINITY MILLS writes, "We hope to do wonderful things."—Three young ladies have formed a circle in KILGORE.—The DENTON Circle has seven members, and one at TYLER has thirteen.

—A lady, well-known to Chautauquans, has been the means of interesting the people of MARLIN in the course of study, and they have formed a circle of about twenty.—The EL PASO Circle mentioned last month, carried out the following program the evening of Nov. 1. It is given to show that not much time is required to get into regular working order:

1. Business—Reading of the minutes; Treasurer's report; General business.
2. Roll call—Answers by quotations from Shakspere.
3. The Lesson—Last fifty questions and answers on geology in THE CHAUTAUQUAN for October; General Circle reading, "Iron and Steel," in THE CHAUTAUQUAN for October.
4. Paper—The Colorado River, Description and Geological Features.

INTERMISSION.

5. Question Box—Answers to previous questions; questions by members. Circle vote on "Questions of Opinion."

6. Select reading.
7. Table talk—The best plan of conducting the circle during the coming year.

THE WESTERN STATES.

OHIO reports eighteen circles for this month. WYOMING, PRICE HILL, and GLENDALE send encouraging accounts of their success.—Five ladies, matrons and teachers in the Soldiers', Sailors', and Orphans' Home, at XENIA, with a few local members, have taken up the course.—This word comes from GREENFIELD: "Although I had read and heard much of the C. L. S. C. and wished to join, I never fully understood the plan till a few days ago the "Pocket Manual" and "Chautauqua Hand-Book, No. 2" fell into my hands. I find others in the same state of ignorance for many have asked to borrow them. We are now organizing a circle, and shall have about six members."—The circle at STEUBENVILLE is increasing slowly, but surely.—

The circles at NORTH BENTON and WESTON have eleven members each.—In NEW ATHENS and NEW LISBON they number respectively twelve and thirteen.—Circles in WEST LIBERTY, WAGON WORKS, YOUNGSTOWN, and CLYDE are beginning with twenty members each.—The MANSFIELD circle enrolled twenty-three names at its first meeting.—At MOGADORE they expect twenty-four members, at CLEVELAND twenty-five, and BELLE-Fontaine, thirty.

In PRATHER, INDIANA, a "neighborhood circle" is spending its time pleasantly and profitably.—MADISON has a circle of seven.—MILROY begins with fifteen. In PERU, the Vincent Circle has eighteen members, and another, not yet named, thirty.

A long list is sent from ILLINOIS. CAMARGO, AURORA, NORWOOD PARK, L'OSTANT, and ARGO have circles of from three to five members.—PRINCEVILLE sends seven names.—The MONMOUTH Circle, ten, meeting once in two weeks.—The Diligentia Circle of WILMETTE, numbers eleven.—The circle at ELGIN consists of twelve

young ladies. — The QUINCY Circle has thirteen members. — The Winchell Circle of JEFFERSON has seventeen; they meet every alternate week. — The Central Avenue Circle of NORTH EVANSTON, has nineteen members, with a prospect of at least ten more soon. — The nineteen members of the LEROV Circle, meet every week, and use the programs of THE CHAUTAUQUAN. — PITTSFIELD and LENA report new circles of twenty-four. — The secretary writes from LEE CENTER that a large and enthusiastic circle has just been organized. — From PRINCETON is the message, "Our circle contains thirty members, and *more are coming*." — In CHICAGO "the cry is still they come!" Beside those of last month appears a still longer list, and the letters are full of inspiring earnestness. The Onward Circle opens with nine members, the Pierian with the same. The Downer's Grove Circle has ten members. The Iris Circle reports fourteen "charter members." The secretary of the Odger's Circle writes, "We have fourteen members, and we meet Monday night of every alternate week. We use the programs in THE CHAUTAUQUAN, and have a question box afterward." — The eighteen members of the CLAREMONT meet weekly. Two other CHICAGO circles not yet having names, begin with thirty members each. — The SOUTH CHICAGO C. L. S. C. "has fifty-seven members, and expects one hundred shortly."

Some of last year's local members in BATTLE CREEK, MICHIGAN, have organized a new circle, which promises a large measure of success. — Efforts are being made to have circles in HASTINGS, and OWASSO. — In MILLINGTON five '90's are studying together. — The M. E. pastor of MT. PLEASANT writes, "We are starting a circle in our village. We hope for more students soon; however, we do

not despise the day of small things, and send the enclosed five names for enrollment." — The LANSING Circle organized with eleven. — A Circle in SHERWOOD has twelve members. — MANCHESTER, BERRIEN SPRINGS, CASSOPOLIS, and THREE RIVERS, all report large and hard-working Circles. — The Philomathaea of CARO, takes the motto, "He who does not advance goes backward"; it commences with forty-five members. — Muskegon and Port Huron both send favorable reports. — The Ninde Circle of Detroit boasts of sixty-five members.

DIXON and SUPERIOR, Wisconsin, are organizing circles. — In Wauwatosa, eight and in Phillips, nine, have joined the Class of '90. — MILWAUKEE has three new circles; one has eighteen members, the South Side Circle, has twenty, and the Plymouth Circle, forty-two. — With a zeal worthy of emulation, the members of the Elm Grove Circle, although living six or seven miles apart, voted to meet once a week.

MINNESOTA has circles at EXCELSIOR, ELMORE, and LE ROY, that have sent but little information except the fact of their organization. — ST. PAUL reports two more circles of fifteen and thirty members. — Three more for Minneapolis: the Hiawatha, seven, and a circle as yet nameless, numbers fifteen, and another of fifteen, the A. B. C., "all of whom are housekeepers."

At JANESVILLE, NEW LONDON, and LENOX, IOWA, circles are being organized. — TRAER has four members in its circle, and MAPLETON, seven. The circle of BEDFORD expects fifteen members, and one in WEBSTER begins with twenty. — In NASHUA, OSKALOOSA, and ANAMOSA, the circles have thirty each.

EUREKA SPRINGS, and CLARKSVILLE, are the first this year to organize circles in ARKANSAS.

THE C. L. S. C. CLASSES.

CLASS OF 1887.—"THE PANSIES." "Neglect not the gift that is in thee."

OFFICERS.

President—The Rev. Frank Russell, Oswego, N. Y.

Western Secretary—K. A. Burnell, Esq., 150 Madison Street, Chicago, Ill.

Eastern Secretary—J. A. Steven, M. D., 164 High Street, Hartford, Conn.

Treasurer—Mrs. Julia N. Berry, Titusville, Pa.

Executive Committee—The officers of the Class.

The joint building committee of the Classes '86-'90 have chosen a lot on the corner of Palestine and Ramble avenues, for the class building at Chautauqua. Plans are now being submitted to the committee. Mr. B. M. Lincoln of the Class of '88 has offered one sketch and Mr. Thomas Greener of the Class of '89 another. The latter has offered to supply full plans, specifications, and details without expense to the committee; certainly a handsome offer.

Mr. H. H. Otis of Buffalo, N. Y., well known as one of the enterprising and trustworthy booksellers of Chautauqua, promises a genuinely fine Oxford Teacher's Bible for one of the prizes for the competitive examination of 1887, and the eminent Century Co. of New York City, will send as another prize, the magnificent work of the "Art of Pheidias." This extends the list of prizes to eight. Two or three more will likely be offered.

The extra thoroughness in reading on the part of those who compete for the prizes renders the latter an incalculable advantage to the class.

Pansies breathe freer and blossom brighter since the Fountain Plot is all paid for.

Funds for the Class home should be sent to the president who will forward receipt for the same. Shares are twenty-

five cents but receipts for less than four shares have not as yet been asked for. An Elmira, N. Y., Pansy has just sent five dollars for twenty shares with sincere regret that she is not able to have a larger part in such stock.

It is rumored that next summer the Pansies will show a surprising number for graduation. Let every circle see to it that no Pansy goes unregistered and without fee paid at Plainfield, and that none drop out from present membership; if there be any backsliders let them be reclaimed.

CLASS OF 1888.—"THE PLYMOUTH ROCK." "Let us be seen by our deeds."

OFFICERS.

President—The Rev. A. E. Dunning, Boston, Mass.

Vice-Presidents—Prof. W. N. Ellis, Brooklyn, N. Y.; the Rev. Wm. G. Roberts, Bellevue, Ohio; Mrs. D. A. Cunningham, Wheeling, West Virginia.

Secretary—L. Kidder, Connellsburg, Pa.

Treasurer—The Rev. L. A. Stevens, Tonawanda, N. Y.

Items for the '88 column should be sent to the Rev. C. C. McLean, St. Augustine, Fla.

TESTIMONY FROM THE CLASS OF '88.

NEW YORK.—I belong to the Class of '88 and enjoy all the readings more than I can tell. I am not a member of any local circle at present, did belong to the Brooklyn Circle but found it impossible to attend as regularly as I would like. My evenings are fully occupied with home duties, and I am employed in a store through the day. My time for reading is riding in the street car to and from business and during noon hour—and I think the time well employed.

OHIO.—I read alone in a drug store—sometimes with

a book propped up before me, as I work. So you can see how interrupted the reading may be. I enjoy this study of the "Word and the Works of God," and am better prepared for my work, from it, I am sure.

CLASS OF 1889.—"THE ARGONAUTS."

"Knowledge unused for the good of others is more vain than unused gold."

OFFICERS.

President—The Rev. C. C. Creegan, D.D., Syracuse, N. Y.

Vice Presidents—The Rev. S. Mills Day, Honeoye, N. Y.

The Rev. J. H. McKee, Little Valley, N. Y.

The Rev. J. B. Steele, Jackson, Tenn.

Miss Genevieve M. Walton, Ypsilanti, Michigan.

Mrs. Jennie M. Haws, Mendota, Ill.

Recording Secretary—Mrs. E. N. Lockwood, Ripon, Wis.

Corresponding Secretary—The Rev. H. C. Jennings, Fairbault, Minn.

Treasurer—The Rev. R. H. Bosworth, Newburgh, N. Y.

Items for this column should be sent to the Rev. H. C. Jennings, Fairbault, Minn.

The Daisy has been chosen as the Class flower.

The Class of 1889 is to have a banner, unsurpassed for beauty in the history of the C. L. S. C. It is to be the gift of the '89'ers of Rochester, N. Y., an original design by competent artists who are themselves Chautauquans. The Class of '89 returns thanks for what it is about to receive.

Members of the Class of 1889 who have failed to finish their first year's work must not let this fact discourage them. The work may be completed at any time during the four years, and the papers returned. Do not drop out of your class even if you are behind. Take up the current year's work promptly, try to accomplish it within the given time, but if not, never give up, and the unfinished work of previous years may be completed during the extra three months in the summer which is the leeway given our busy readers every year. There were several things which were embarrassing that our '89 Class had to meet at Chautauqua last summer: the non-appearance of officers; the absence of any minutes of last year's proceedings; no name, or motto. The first, led to the election of the above officers, and the adoption of these by-laws:

1. The officers of this Class shall consist of president, recording secretary, corresponding secretary, treasurer, and a vice-president from each state or territory of the Union, and other countries when desired; they shall be elected annually, by majority vote of those present at a Class meeting at Chautauqua, on or before August 12.

2. The special duties of the vice-presidents shall be to de-

velop and superintend the C. L. S. C. work in their respective districts, and visit local circles whenever practicable, and report to the secretary, on or before July 1.

3. A copy of Class minutes shall be left on the grounds in the hands of the secretary of the assembly.

CLASS OF 1890.—"THE PIEREANS."

"Redeeming the Time."

OFFICERS.

President—The Rev. D. A. McClenahan, Allegheny, Pa.

Secretary—George H. Iott, Evanston, Ill.

Treasurer—Mrs. E. P. Wood, 252 General Taylor street, New Orleans, La.

Vice-Presidents—John Lee Draper, Providence, R. I.; the Rev. Leroy Stevens, Mount Pleasant, Pa.; Charles E. Weller, St. Louis, Mo.; Mrs. Dr. Edwards, Randolph, N. Y.; Miss Anna L. Sanderson, Toronto, Canada.

Building Committee—Chairman, the Rev. H. B. Waterman, Griggsville, Ill.; Secretary, John R. Tyley, Chicago, Ill., with Miss Leonard, Mr. Davidson, the Rev. J. Hill, and Dr. J. T. Edwards, Randolph, N. Y.

Items for this column should be sent to Geo. H. Iott, Evanston, Ill.

The Class of '90 numbers at present ten thousand members. This is a little ahead of the Class of '89 at this time last year; so that the prospect for the C. L. S. C. is better than ever.

There are over twenty members from foreign countries in the Class, representing Japan, West Indies, England, Scotland, India, Victoria, and other points in Australia, Hawaiian Islands, Germany, and Russia. Nearly every state and territory in the Union is represented.

Here is a most favorable item for the Class of '90: The names of one hundred eighty-three new members from the Pacific Coast were received at the Plainfield Office a few days ago.

The first number of the Class paper, *The Pierean*, has been published.

The Class counts among its members Mr. E. A. Skinner (Treasurer of Chautauqua); Professor Olson of the Greek Department; Mr. and Mrs. Charles Barnard of New York; Mr. Leon H. Vincent, Dr. J. T. Edwards and wife, and the Schubert Quartet.

POST GRADUATE CLASSES.

The New England members of the Class of '85 are requested to send their post-office addresses to the New England Class Secretary, Miss Annie M. Chapin, 1 Somerset street, Boston, Mass. At the annual meeting at Lake View last summer the secretary was instructed to correspond with each member of this branch of the class during the year.

POPULAR EDUCATION IN ENGLAND.

BY CHANCELLOR J. H. VINCENT, LL. D.

SECOND PAPER.

We parted last month in the London Polytechnic. I tried in that number of THE CHAUTAUQUAN to get through with its wonderful program, but could not, for I happened to slip into the art room where classes were at work in stone and wood carving. It is a chamber of art of which any school in the world might be proud. Young workmen and clerks are here trained in architectural, ornamental, figure, flower, and fruit carving, and all kinds of French, Flemish, Italian, Renaissance, Gothic, and early and modern English styles. For this, the student pays for forty-eight lessons a little over five dollars.

The lessons in brick laying and brick cutting are exceedingly interesting. One is surprised at the variety of legitimate subjects introduced in the syllabus of eighteen points on which final examinations are conducted, beginning with "Bricks:—The name, nature, and properties of the various kinds of bricks in general use, and the purposes for which each kind is specially fitted; the mode of preparing and tempering the clay, moulding and burning the bricks and testing their quality." This remember is No. 1. Now No. 18 embraces "The general mechanical principles involved in brickwork and masonry, the resistance to crushing and the average weight per foot cube and per rod."

But the time would fail me to tell of this grand provision

for young men made in the heart of London by one of its own rich merchants. Young men between the ages of sixteen and twenty-three may join on the payment of three shillings (seventy-five cents) a quarter. The amount may be paid in weekly installments. This sum entitles a member to the free use of the library, the chess, draught, social, and reading rooms. Saturday evening concerts, lectures, and other entertainments are provided to members at a nominal fee. They are also permitted to join the regular classes at a greatly reduced rate. Here, too, is one of the finest gymnasiums in London where members may have the best of training in "boxing, fencing, single-sticks, gymnastics, etc."

One has a worthier conception of this great educational movement, when he learns that fully ten thousand young men are now members of, or are in some way associated with, the Polytechnic.

Associations of almost every kind are provided for these hosts of young fellows. They have an athletic club, a lawn tennis club, a bicycle club, an orchestral band, a reed and brass band, drum and fife band, a savings-bank, a society insuring against accidents, a polytechnic choral society, a total abstinence society, a science society, and a parliamentary debating society. They have an annual industrial exhibition with brilliant entertainments from time to time.

Nor do these scientific, industrial, and recreative features comprise all of the plans by which Quinton Hogg, the Peter Cooper of London, blesses the ten thousand young men under his influence. He is a Christian and a believer in personal, vital piety. He personally conducts a Bible class for members and friends (young men only) every Sunday afternoon at 3:15 o'clock. His excellent wife holds a class for the study of the Bible on Thursday nights at 8:30, and every Sunday evening at 7 o'clock evangelistic services are held, open to all, and conducted by Mr. Hogg's right-hand man, W. T. Paton, Esq., a big and big-hearted and deep-voiced Englishman who was, I believe, chairman of D. L. Moody's committee in London. Mr. Paton has general management of the whole Polytechnic work.

Every summer, Mr. Hogg receives as his guests a number of young men, at his elegant residence near Southampton. They stay for a week or more enjoying hospitalities which although they cannot now reciprocate, they can never forget. And he, the royal host in following his divine Master's advice touching whom to invite when making a feast, receives not only the gratitude of his young guests, but finds that He also has come in whose name the service is rendered, and He comes to abide. And with Him in the house how rich and full is its peace!

In 1848 a system of evening class instruction was begun at Crosby Hall in the city of London. In 1860 these classes were transferred to Sussex Hall, Leadenhall street. They were then called "The City of London College." In 1883 a new building was erected in White st., Moorfields, at a cost of \$80,000. It will accommodate 4,000 students. This is for the benefit of evening students. A laboratory is supplied with accommodations for nearly one hundred chemical students, each being supplied with apparatus, working space, separate cupboard, and drawer. Here, too, are art and cast rooms, a library of 3,500 volumes, a large reading room, and a coffee, chess, and draught room. Every Thursday evening, lectures and entertainments are given in the hall of the college.

The 1886 autumn and winter program is before me. It includes "Recitations from Dickens," concerts by the college choir and by the college violin classes, an entertainment by "The Pickwick Histrionic Club," and

lectures on "The Management and Production of Voices," "The Dutch and their Doings," "The Beautiful Blue Danube" (with dioramic illustrations), etc., etc. Classes are taught every evening (Sunday, of course excepted) by the ablest instructors, in almost any linguistic, literary, scientific, and technical subject. Annual college examinations are held in the summer by "eminent examiners upon whose reports certificates are granted." A large number of valuable prizes are awarded, such as "The Commercial Essay Prize of Five Pounds," "The English Essay Prize of Two Pounds," "Twelve Mitchell Studentships of the value of Ten Pounds each, giving free admission to the college classes and Lectures." I have counted over seventy-five prizes offered annually in connection with these examinations of the "City of London College."

The "Birkbeck Literary and Scientific Institute" is an older and larger evening training school than that just described. It was founded by Dr. Birkbeck in 1823 and claims to have "called into existence 2,000 institutions of a similar character in Great Britain and the Colonies." During the more than sixty years of its existence, Birkbeck Institute has given instruction to 80,000 different persons, "of whom many have distinguished themselves in art, science, and literature." Here again we have a school of art, a sketching club, a debating society, a students' literary society for literary composition and criticism, a students' scientific society, a library of 10,000 volumes, a reading room, and also a magazine room and study. Here, too, are popular lectures and any number of valuable prizes designed to encourage examinations. Many of these prizes are offered by the best government educational institutions, such as the "City and Guilds of London Institute," "The Royal School of Mines," etc. Ladies are admitted to these classes of Birkbeck. Subscriptions to the institution, dating from the day of payment, including admission to classes at reduced fees, admission to lectures, entertainments, reading and magazine room, and use of library of 10,000 volumes, are as follows: Annual, gentlemen, about \$4.50, ladies, \$3.00; half-yearly, gentlemen, \$2.50, ladies, \$1.75; quarterly, gentlemen, \$1.50, ladies, \$1.00. After two years of consecutive payment the annual subscription is reduced eighteen per cent. The course of lectures announced is very strong and brilliant.

The "City and Guilds of London Institute for the Advancement of Technical Education" is another of the numerous provisions for popular education in the great city of London. It is designed to "afford facilities for carrying out an examination" in a very large variety of subjects, but "no candidate may be examined in the same year in more than one subject." Existing institutions and technical classes organized independently but reorganized under certain conditions, do the work of teaching, while assistance is rendered local technical colleges which operate under the general direction of the Institute. For example, in February, 1886, a "Technical School of Metallurgy and of Engineering" was opened at Sheffield, England. The "City and Guilds of London Institute" donated \$1,500 to the movement, while the local subscriptions in Sheffield amounted to more than \$57,000. In Leicester the Institute gave \$3,500. Local donations and subscriptions reached the sum of over \$17,000, and the report just issued says, "During the present session 239 students are receiving instruction in the registered classes of the Institute in connection with the staple industries of the town of Leicester."

In an appeal for donations to the funds of the Institute the vice-president under date of November 1885, says, "Within the short period during which the Institute has been at work,

the Finsbury Technical College and the Central Institution have been erected and equipped at a cost of about £135,000 (\$675,000); an Industrial Art School has been established in the south of London; small subsidies have been granted toward the erection and maintenance of technical schools in the provinces; and more than two hundred sixty technological classes, attended during the past season, by nearly seven thousand students, have been organized, and in part supported in the principal manufacturing centers throughout the kingdom." The great manufacturing and commercial companies appreciating the work that is being done by the Institute are making liberal subscriptions.

As to the examinations carried on under the auspices of the Institute, "the committee of any art or science school under the (government) science and art department, or any school board, or any local examination board connected with the society of arts will be accepted as a suitable committee for carrying on the Institute examinations. In special cases, also, the Institute may entertain propositions for the establishment of special local classes for the technological examinations." There are two grades of examinations—the ORDINARY "intended principally for apprentices and journeymen"; the HONORARY "for foremen, managers, and teachers of technology." Again observe, "there is no limit of age and no fee for examination." But I have neither time nor space to develop at length the wise details of this most beneficent scheme from which Chautauqua has many lessons to learn.

I should like to have made a somewhat full report of an admirable institution in Edinburgh which I was permitted to visit—"The Watt Institution and School of Arts," (approved by the Queen in 1855), recently re-organized as the "Watt-Heriot College." It is a union of two philanthropic and well endowed institutions in Edinburgh—"The School of Arts," founded in 1821, enlarged and lodged in a new building in 1851, and called in honor of and as a memorial to the great inventor James Watt, "the Watt Institution and School of Arts" and the "George Heriot Hospital" an institution established on a fund and estates bequeathed by "George Heriot, Jeweler to King James the Sixth" in 1623. It is the object of the "Watt-Heriot College" to provide "Technical and General Education for the Industrial classes of both sexes on a scale suitable to the great and increasing wants of these classes." Thus are provisions made through the philanthropy of past generations and the wisdom of the present, for the education of the people, the people so long ignored, the people so long abused, the people whose souls are as precious in the light of God as are the souls of princes and nobles, the people who are to rule the world by right, through intelligence and in the fear of God whose voice shall be echoed in their decisions. God of the Heaven! Bless all people who on earth do dwell!

In the light of these movements outside of the college, for the education of the out-of-school multitudes, we can appreciate the more recent attempts of the universities themselves to reach this long neglected section of the great English public. I refer especially to the "University Extension Movement" and the somewhat famous "Toynbee Hall" experiment in the east of London. I have not time here to describe them. These are efforts of Oxford, Cambridge and London Universities to reach the classes hitherto unreach'd by these established, dignified, and ancient schools. The

former, the "University Extension Movement" provides instruction through lectures, class conference, and examinations in a portion of the regular resident college curriculum, so that persons by utilizing evening lectures and classes under the ablest university professors, may reduce the time of required residence at either Oxford or Cambridge. Under this scheme "a university degree will be within reach of any workman who can afford to spend £100 (\$500), spread over five years." The enterprise is recent, but is being carried on with much zeal and vigor.

The "Toynbee Hall" scheme is wonderfully interesting. It is a sort of university educational home missionary movement. It is the consecration of university scholarship and taste to philanthropic service among the lowest people who can be reached and lifted by educational opportunity put within grasp of educational ambition. It is not evangelistic. It is a sympathetic, humanitarian movement, with the right, if any individual worker chooses to employ it, of prayer and personal spiritual effort. It is "sweetness and light" without a necessary use of the "honey" of the Gospel or the "lamp" of life. Both may be used. But they are "optionals." Two years ago the Oxford and Cambridge Universities planted a colony in East London "to provide education and the means of recreation and enjoyment for the people, to inquire into the condition of the poor, and to consider and advance plans calculated to promote their welfare." Here in the heart of poverty and vice are halls, dormitories, resident college graduates of wealth living with the people, classes, lectures, concerts, pictures—everything that culture can do to impress and uplift. The young and cultivated fellow who showed me over the institution "believed that prayers were read at sometime," "didn't know where or by whom" and in response to my question as to whether he attended or not replied "No, indeed." The Toynbee Hall is a remarkable movement. I intend to look into it more fully, having an idea that my informant although one of the self-sacrificing missionaries of culture, represented only one side of Toynbee and of Oxford and of the Church of England.

I have reached a point where the editorial pen is about to drop into the ink, and I foresee a possible official "Thus far and no further." Therefore, I must close without reporting my further observations of educational work in Scotland, where I enjoyed a talk and a cup of tea at the "University Club" with Prof. S. S. Laurie, who occupies the chair of pedagogy in the University of Edinburgh and where I heard his closing lecture on the History of Education before a class of Scottish school-masters. I must forego the pleasure of reporting the English "University Correspondence Class," the "Young England Correspondence Class," and the new movement known as "Recreative Evening Classes." I must not tell the story of "The Anti-Rust Club" and other societies organized to help the people of too much work and of too much leisure. Suffice it to say that I have worked diligently by day and by night, often to the marring of plans for driving and sight-seeing, that I might study as thoroughly as possible the schemes which on this side of the Atlantic aim to help the people of all classes and conditions, to lay hold of their best inheritance—knowledge and education. One of these days I hope to be able to prepare a fuller report.

Paris, November 20, 1886.

EDITOR'S OUTLOOK.

THOU ART THE MAN.

There is room for all sorts of preaching; but the good preacher comes to the point which is, after all, personal. If the people are as good as they ought to be, let the preachers take a vacation till next spring or until the people are not as good as they ought to be. If the people are not as good as they ought to be, let the preacher make them see it—if in no other way by plainly saying "I mean you." This is the point. We are in great need of being thrust through and through with it until we are humbled into repentance. Dearly beloved pastors, please come to the point. The average church-goer has no idea that you mean him. You might preach to him for fifty years, pleasing him every Sunday, and yet never suggest to him that you are dealing with his sins and seeking the salvation of his soul.

The kind of preaching wanted this winter is that which will set men to asking "What must we do to be saved?" "Who shall deliver me from the body of this death?" "What good thing can I do to inherit eternal life?" Your sermons go over their hearts, up to their heads. They enjoy it. Try hitting them in the old fashion, when men "were pricked in their hearts." We don't say it is easy to do it. We only say it is necessary to do it. It is the art—is it becoming a lost art?—which every preacher should learn.

How to make men dissatisfied with themselves, ashamed of themselves, sick of their frivolous and worldly lives—it is your business to learn that. The devil can give them lessons in self-complacency. They can instruct themselves in having a pleasant and enjoyable meeting. What they need of you is another sort of influence, an influence which shall reveal their sin and need. They need it now, at once. They are growing in sin. They are on the way to the Judgment. Come to the point. Be quick about it. They will die on your hands, unrepentant and unsaved, if you do not convince them of sin.

Pointed, awakening preaching is the want of the time. We have all other good sorts in superfluity. This we are short of. Somehow, the sinners get harder or the shots of the pulpit get weaker or more aimless. Surely it is possible to do better, to hit the personal conscience. Try it. Pick out your sinner, and let fly this shaft: "Thou art the man."

ETIQUETTE AMONG PUBLIC MEN.

The newspapers had a sensation out of the Harvard celebration, which may be considered extraordinary. Dr. McCosh, the venerable president of Princeton College, New Jersey, took offense at certain lines in the poem of Oliver Wendell Holmes, and somewhat prematurely took his departure from the festivities. It may be freely conceded that the poet was somewhat too anxious to score a point for his religious views and that what he wrote of Andover was better poetry than truth; but it does not appear that Dr. McCosh had any sufficient reason for taking these gifts meant for Andover back to Princeton with him by an early train.

More recently, Mr. Blaine refused to shake hands with Senator Edmunds, at the funeral of ex-President Arthur, because an old letter of the Senator's, then recently printed, did violence to Mr. Blaine's feelings. In Dr. McCosh's case the grievance was imaginary; in Mr. Blaine's it was probably a real one. A guest is under some obligations to the occasion and to his fellow guests. He is forbidden by good manners to hastily take offence or to obtrude his personal griefs.

It is necessary to the peace of society to maintain by public opinion some general restraints upon personal feeling, and when eminent men break these restraints they set a bad example for other men, and take away the protection which the self-suppression required by good manners gives to the good

order of society. Men would go to banquets with daggers and pistols if society did not require us to respect the host or the occasion enough to take no offence, whatever may go wrong and to carry no personal pique or grievance under the roof which hospitably shelters us.

In the case of Dr. McCosh, the alert sensitiveness which interpreted some banquet poetry in a sense not intended by the poet, ought to have been laid aside long ago. It might be tolerable in youth; it is unbecoming in age. Dr. McCosh is too secure in his honors and his fame; his life in this country has been too brilliantly successful, to make it necessary for him to keep watch over his name and renown; and as much may be said of Princeton.

We reluctantly call attention to these two cases. It is necessary for somebody to say that they were not in good form, not good manners, not models for imitation—but the reverse. The guest is bound to forget himself in the interest of his company; bound not to forget himself in his personal interest. The rule is too often violated. Conspicuous offenders attract all eyes to the offense; and the public must rebuke or expect imitation and the perils of it.

We had intended to say something of some other squabbles of the month. Mr. Lowell, for instance, made altogether too serious a matter of Mr. Julian Hawthorne's published "interview." A great man needs a hard epidermis; the world does not like to hear him crying in the streets, "Julian has abused me."

A shade or two worse is that political squabble down in Virginia between Congressman Wise and ex-Mayor Lamb of Norfolk. In this case an unwise political speech—unwise because it was personal—was the occasion for a social convulsion—in the newspapers, at least. All public men are in danger of presenting to the public what some one has called their "fool side"; and we have had in a month enough of it to last ten years. And in each case a little proper dignity and plain good sense would have served the best interests of all concerned.

WOMEN ON SCHOOL BOARDS.

The propriety of having women upon school boards is being discussed. The debate comes late; for the wonder is that placing women on such boards has so long been neglected. The simplest rules of justice would give women some representation in the control of public schools. They are the persons most deeply interested. They do nearly all the teaching, and they have a paramount interest in the children. It would look a little strange to a visitor from Sirius (or any brainy planet or star) to learn that we entrust the work of our public schools almost entirely to women, but put over them only men in the non-teaching part of the organization; and that, as a rule, an American mother is ineligible to the office of school trustee or director.

The absurdity of the neglect hardly needs illustration. It is injustice to pay women such unequal wages for teaching; it is an indignity to deny them representation in the boards of management; and the injustice will last until the indignity is put away from among us. We cannot expect masculine boards to see the claims of feminine teachers so long as women are excluded from the management. The exclusion is ready-to-hand proof of the inferiority of women in school work. If a woman can have no hand in supervising the schools, it may be not altogether illogically inferred that she should take such inferior wages as the superior sexed directors may ordain.

There are many grounds for presuming that women would excel men as members of school boards. For one thing, the women of any town take a livelier interest in the schools than

men do. They talk more to the children about it and they have more leisure to think about it. They are in fuller sympathy with the wants of the children and with the difficulties of their sisters who are doing the teaching. An average school manager could learn a great deal—let us hope he sometimes does—from his wife or his sister. Every town contains a number of married women who have been teachers, not for one term in a country school house, but for several years in graded schools. These women know the business and how to manage and how not to manage it; while it is almost a rule that the men who are elected do not know the business and never learn it.

We do not insist, however, that men are altogether out of place on school boards; we forbear pushing logic to extremes. A few men in the boards—about the same proportion as in the corps of teachers—would be found useful, no doubt. But the school board of the future will be mainly composed of women. In our barbarism on this subject, we shall have to begin, perhaps, by electing, when we get a chance, one woman to three or six men; but so soon as the right road is taken the tendency will be to reverse the proportions.

Some patience must, of course, be exercised in matters of woman's rightful place in social work. It is only yesterday that the world found out that women can do many things well, and some things better than men can, and that room must be found for woman as a worker. It is but recently that the public has realized that women do nearly all the work in schools and do it better than well, as a rule. But the time for patience is about run out. We ought to make room for women on school boards, and leave the voters to decide how many women in any town shall take part in such management. The Legislature should be assailed this winter with an imperative demand for this too long delayed reform. No doubt they will see the point when it is enforced by petitions and a few of the numerous arguments for the change. We hope the masculine creature is dead and buried who used to doubt the propriety and wholesomeness of giving woman a representation in the supervision and management of the public schools. The reform is a measure of common sense and common honesty.

CHURCHES AND THEIR POOR.

The winter season gives charity her largest opportunity. In summer, the worthy poor seem to succeed, in very large measure, in keeping the wolf from the door. But when the frost precedes the wolf, the latter is apt to find the door already open.

It is a proof of the real need of benevolence for the poor that the demand for it quadruples in winter. The increase of the calls for help corresponds to an increase in the cost of living. This increase comes as certainly as the fall of the leaves and it begins when the leaves fall. The better organization of the charity of the churches is greatly to be hoped for as a means of the more thorough care of the needy. Christmas time is set in the midst of these needs.

A few churches known to us have tried with success an experiment which at first sight seemed almost cruel. The children expect Sunday-School presents at this season and look forward to it with special pleasure. But the experiment we refer to changes the Christmas celebration in the matter of presents, and instead of coming to the church to receive presents, the children come with presents for the poor. Those who devised this plan have the Lord's word for its superiority over the old way—He said, "It is more blessed to give than to receive." In the cases referred to, the Lord's word was justified by the result. The children enjoyed giving to the poor.

There are very few churches which do not need a fund to aid the poor in winter. There are none in which there are not members to whom gifts of clothing or food seem like manna from heaven—they are so necessary and so timely. A child's gift in such an emergency is always gracious and carries with it no feeling of afflicted independence. The children enjoy this giving to the needy far more than they enjoy presents made to

themselves. If you doubt it, give the experiment a fair trial and be convinced.

But, in the cases referred to, it soon became apparent that the gracious custom ought to be extended and to embrace the whole church—making a church Christmas festival for the benefit of the poor. Not a feast at so much a head, proceeds to go to the poor, but an in-bringing of supplies of all sorts to be distributed among those who may lack. Indeed, to realize its aim the Christmas offering for the poor ought not to be made in any medium of exchange—not even in gold. It refreshes charity to be privileged to carry the loaf to the hungry and the coat to the naked. It is easy to see that a great opportunity lies in this experiment. Let some wise means be used to learn who are in need. Then let the church gather its gifts together and rejoice over them and send them by gentle hands, by the children if possible, to the homes of the needy. It will teach all who participate, the blessings of giving; it will especially put charity on a proper footing in the minds of the young.

In every church, too, there are some who are not destitute, but are straitened in circumstances. It is a good season to remember them and devise little surprises which will brighten the winter skies for the old and the infirm. It is good for any one of us to remember the poor; it is even better for a whole church to unite in such a remembrance. It is a more effective stimulant than charity sermons and plate collections. And it will produce more in the way of substantial relief.

Let us add that there is some danger that churches may grow hard toward their own poor. The dole of a book-keeping religion becomes often colder than December frosts. Making gifts of things needful at the season of need, tends to keep the heart of the church warm, and to reduce the increasing chill in the hearts of the unfortunate recipients of charity to whom the supreme hardship of poverty is receiving from frozen hands the necessities of life.

THE C. L. S. C. IN SCOTLAND.

The developments of the past few years seem to authorize us to expect a Chautauqua colony to be founded annually. We have had in turn South Africa, Japan, Russia, and now it is Scotland. The brief notes published in the November, December, and the present issue of *THE CHAUTAUQUAN* give the facts in the history of the movement in the last named country as far as we know them, viz.: the desire expressed in a letter received last summer from the Reverend Donald Cook of Dundee, of "helping on the work of the C. L. S. C. in this place if I can;" the announcement from Chancellor Vincent that on October 8, the Scottish C. L. S. C. movement was inaugurated with the Reverend Donald Cook at its head; and the news of the present issue that copies of circulars and of *THE CHAUTAUQUAN* are being sent out in Scotland where it is believed they will do good.

An examination of the Scottish circular shows that the methods used in the new field are identical with those in operation in this country. The course laid out for the reader covers the same ground, English publications being substituted. In connection with these books *THE CHAUTAUQUAN* is required. The American books may of course, be read and can be obtained in Edinburgh.

The result of this agitation will be watched with keen interest in this country. The probabilities are that it will be eminently successful. There are excellent reasons for the success of a popular educational movement in Scotland. The people are of that "slow but sure wit," which, when convinced that an idea is suited to their needs, grasps it tenaciously. An after school course of study is by no means a new thought to them. In the December issue of *THE CHAUTAUQUAN*, Chancellor Vincent began a review of the efforts made in England for popular education. The Scottish movements are essentially like those of the English, consisting of the evening educational classes, the South Kensington art classes and the technical classes. Just what is and what is not doing by these agencies Mr. Cook tells in his circular:

EDITOR'S NOTE-BOOK.

"Every one will admit that these agencies are doing a great deal to help young men, and to a more limited extent young women, to better their surroundings and increase their social happiness; but those who are best acquainted with the actual detail work and the results of such classes, will at once acknowledge that they are far from yielding a satisfactory solution of the wide problem of finding the best means of securing, through education, the moral and the social elevation of the people.

"And even if it were proved that the evening classes left nothing to be desired, it is clear they can only reach a section of the people. There are multitudes who are engaged in occupations in the evenings, and more who, by reason of age and home duties, are precluded from taking advantage of such educational helps. Many, too, who have been at college, would be glad to be brought back to a re-reading of former studies, both for the purpose of increasing their information, and of keeping their mind in exercise and health."

Those familiar with the conditions which have made Chautauqua so popular in the United States will see at once that the state of affairs in Scotland is identical.

An additional reason for expecting good results in Scotland is the prestige the C. L. S. C. has in America. Chautauqua means vastly more to-day than it did even five years ago. It has now a name and honors, and these facts recommend it. There is not the serious difficulty in presenting the work in Scotland that there is in Japan and Russia; the language is the same; the mass of people recognize their need of more education; and warm advocates are easily found.

The "large hope" Chancellor Vincent expresses in regard to the Scottish movement may with equal reason be extended to England. Indeed we expect at no distant day to find the list of C. L. S. C. secretaries, enlarged this month by the name of the Reverend Donald Cook, including the name of an English secretary.

EDITOR'S NOTE-BOOK.

Since the December issue of this magazine Chancellor Vincent has left England for the Continent. Before leaving London, however, he set on foot certain plans which, judging from the result of most of the Chancellor's ideas, will produce a large Chautauqua increase in that country. In the American chapel in Paris, whither he went from London, he has spoken with excellent effect on the subject of the Chautauqua Literary and Scientific Circle.

The trial of Alderman McQuade for complicity in the fraudulent acts of the board of aldermen of New York City in 1884, was concluded Nov. 24. The evidence against him was conclusive. Two of the members of the league formed to sell out the city's honor, appeared and told the whole story of corruption. In the face of as clear a case of guilt as was ever made, the jury returned a verdict of nine to three for acquittal. A betrayal of justice so flagrant, so unmistakably fraudulent has made honest men, far and wide, turn away in disgust. It must not be forgotten, however, that Jaehne was convicted in May last on much less evidence than is at hand in the McQuade case. The failure of justice is making the press more clamorous than ever for an honest trial, and the investigations will probably reveal methods of "packing" the jury which will be of service in the future. Let us hope that the new trial will be in favor of honesty.

The death of ex-President Arthur occurred on Nov. 18, in New York City. He had been ill for a long time and his death was expected. Mr. Arthur first won public recognition for his skill as a lawyer. In the war he served in the quarter-master's department, providing arms, clothing, and transportation for large numbers of soldiers. But two important offices were filled by him before the death of President Garfield placed him in the chair of the chief executive of the nation, that of collector of the New York Custom House, and of vice-president of the United States. He was a great politician, but when obliged to take the position of chief executive of the nation, his tact, courtesy, and sense of responsibility made him a statesman.

Among the notable events of 1886 must be reckoned the celebration of the two hundred fiftieth anniversary of Harvard University; and the most memorable feature of that celebration was the oration of James Russell Lowell. It is said that eloquence is in the man, the subject, and the occasion. At fair Harvard's celebration the three essentials met in the oration.

Mr. Lowell told us in his oration that only those languages could be called dead in which nothing living has been written. "Men are ephemeral or evanescent, but whatever page the authentic soul of man has touched with her immortalizing finger, no matter how long ago, is still young and fair as it was to

the world's gray fathers." These sentences reveal Mr. Lowell's belief that Greek literature, not Greek grammar from German stand-point, is a royal road to the best culture. Who of our modern poets and essayists is a better example of this than James Russell Lowell, the author of side-splitting Yankee verse and, not least of this very practical and yet amusing oration? Steep a man, not in Greek accents, but in Greek literature, and if it soaks through him, you will have a very manly, very human, and very natural man.

Charles Francis Adams, grandson of the second president of the United States, and son of the sixth president, died at his home in Boston, Mass., on November 21. The chief official positions he held in his lifetime were in the legislature and senate of Massachusetts, in the United States Congress, as minister to England from 1861 to 1868, and as American arbitrator at the Geneva tribunal. His reputation was well-founded as an able and strong writer on public questions. Mr. Adams was a statesman of the old school, holding individual independence, justice and integrity above all party issues.

Under the head of "Prisoners of Poverty," Mrs. Helen Campbell, a favorite contributor to THE CHAUTAUQUAN, is publishing a series of weekly letters in the *New York Tribune*. These letters are the results of personal investigation by Mrs. Campbell of the condition of the working women of New York City. The fraud, greed, and poverty they picture have caused much discussion in press and pulpit. It is not clear what can or ought to be done. For the fraud, there is the law; for the greed, there is public opinion; for the poverty, the generous giver. But these are slow agencies and not always sure. The flood of light Mrs. Campbell's investigations is letting in is undoubtedly the best and first thing.

There is one remedy possible to a very large number of the "prisoners of poverty," but the difficulty lies in inducing them to accept it. It is shown that the average wages for shop and factory girls are from two dollars fifty cents to five dollars per week, a rate at which it is barely possible to exist in a city. Yet women endure the low wages, long hours, and heartless treatment, rather than *lower* themselves by doing house-work with better pay, kinder treatment, and happier surroundings. Clearly the first work of the philanthropist is to teach these workers that serving a family is not only more comfortable but more respectable work than slaving at starvation rates in a shop or factory where they do not receive consideration or kindness.

Widespread interest and sympathy have been expressed in the subject discussed in the October issue of this magazine, "The C. L. S. C. in Prisons." One friend sends a sum of money to

be devoted to buying books for the unfortunate men who are willing to take up the course, another sends a subscription to THE CHAUTAUQUAN with these words, "This copy of your magazine will be read behind the bars by a young man possessing many noble qualities and fine intelligence, but who was a prey to the tempter in an evil moment." There is a general feeling that the Chautauqua course may assist in doing what it is evident should be done for criminals—sending them from prison better men than when they went in.

The Canada Pacific Railway has taken the lead in adopting the twenty-four system of reckoning time, on its main line, and branches between Lake Superior and the Pacific. Mr. G. M. Grant in an article showing the necessity for a general adoption of this method says:—

"To show how unscientific is the system of reckoning time by our position on the earth's surface, we have only to reflect that all meridians converge at the pole. If we ever get there, we can take our choice between the days of Berlin, Paris, London, New York, Winnipeg, San Francisco, Pekin, Calcutta, and as many others as we like, and live at the same moment of time in the different hours, days, months, or years of different places. What a blissful place for the Irishman who pathetically complained that he wasn't a bird, and therefore could not be in two places at once."

Most of us will submit gracefully to the theory that in character and habits we are largely somebody else, that a strictly self-formed and original mind and life are out of the question, but all of us revolt at the thought that our bones and flesh and muscles are not strictly private property. A danger threatens us, however. The surgeon has proved that if we lose a bone he can substitute a splinter from somebody else, that foreign flesh can be made to live in our bodies, and now, most horrifying of all, that teeth freshly drawn can be made to retain their vitality for a month, and when placed in the natural sockets from which other teeth have been taken, if temporarily secured, will become fixed, and grow as if indigenous to the soil. It is scarcely supposable, however, that the manufacture of false teeth will be broken down by this discovery when we remember that 25,000,000 are manufactured annually.

The special delivery system was the "new-thing" in post-office work last year. From the report of the postmaster-general which came out in November, it seems that the public has found it advantageous. Over a million letters were received in the last year for special delivery with a gross profit to the government of about \$28,000.

New York philanthropists are taking up coffee-houses as an antidote to the saloon. Wherever we have seen the coffee-house tried, it has been with but moderate success, because it was not made as attractive as the saloon. Light, warmth, good cheer, and sociability are stronger attractions to the young, at least, than beer and rum. A coffee-house which is more brilliantly lighted, more comfortably furnished, and as cheerful in society as the saloon across the way, will be the more popular place.

On November 11, there died at Princeton, New Jersey, one of the most influential Presbyterian divines and scholars in America, Dr. A. A. Hodge, professor of didactic and polemic theology in Princeton Seminary. Dr. Hodge was sixty-three years old. His visit to Chautauqua a few years ago is remembered with pleasure by Chautauquans.

It is said that a new and wide avenue of usefulness opened before Dr. Hodge in his last years in the popularization of theology. A class of Princeton ladies a couple of years ago induced him to give them talks on "Presbyterian doctrine." This led to a similar engagement at Philadelphia. This winter he was to speak at Orange, and calls were coming from all parts of the country with growing crowds of hearers, includ-

ing men as well as women. The driest dogma became a fascinating story under his touch.

The immense value of the Life-saving Service of the United States is not evident to all landsmen. The late report of the general superintendent of the service contains a few figures which ought to convince every one of its usefulness. In the last year there have been 322 disasters to vessels; only 27 persons have been lost by these wrecks, 2,699 having been saved by means of the stations.

It is difficult to find a point of common sympathy in human affairs over which men do not organize for the mutual encouragement of one another. As unique as any of the multitude is the Society of Titans, an organization whose *sine qua non* is a height of at least six feet two. Two annual celebrations are held by the Titans, a farewell to Mother Earth on the first day of winter and a welcome at her awakening at the beginning of spring. There are only a few of our well-known men admissible to the Titans. Congressman Reed of Maine has the requisite stature, also the Rev. Phillips Brooks.

No stronger proof could ever be required to overthrow the last vestiges of the once prevalent belief that severe mental labor tended to shorten life than the following fact. In Paris recently (August 31), the one hundredth anniversary of the eminent chemist, M. Chevreul, was celebrated with appropriate honors. Some idea of the amount of work done by this centenarian, whom M. Pasteur in his letter of congratulation called "the master of masters", may be gathered from the fact that his first book was published in 1806, and all the years since that time have been devoted to earnest study in his beloved field of science. He clearly remembers Louis XVI. and the days of the Revolution, and talks of the glories of the First Empire. He has lived during eleven régimes.

Unless some measures are soon brought to bear against the felling of the "big trees" of California, in a very few years these grand old monarchs will have nearly disappeared. The wood, which is of a fine red color, is coming into great demand in many eastern cities for building purposes. In order to keep up the supply, seventeen lumber companies are now at work devastating the forests as rapidly as possible. The country ought to think twice before allowing itself to be robbed of these "curiosities" which require over one thousand years to come to maturity.

Man-trap building, as the erection of rickety houses might be called, has received a severe blow. The most famous of this class of criminals, Buddensiek of New York City, has been convicted of manslaughter, by the New York court of appeals, and declared responsible for the death of a workman employed on a row of his buildings. This confirms the judgment of the lower court. His sentence is ten years in state's prison.

"A lady who is worth her millions was the other day making a purchase. She noticed that the young woman who waited on her wore on her bosom a little silver ornament hanging by a purple ribbon. She asked her: 'Isn't that a badge you are wearing?' 'O yes,' the girl quickly replied; 'I am one of the King's daughters.' The lady opened her mantle, and on her bosom also was a silver cross and the royal ribbon. 'Then we are sisters,' she said, reaching her hand across the counter."

The "King's daughters" is the name of an organization only a year old. Ten ladies began it, forming a "Sisterhood of service." They adopted Dr. Hale's 10x1=10 plan and each pledged herself to form a ten. To-day hundreds of groups in every part of the country are quietly at work in services of love; one visits the sick, another sings, another forms a flower mission. Wherever a cause needs help, a ten lend a hand. Royal service, indeed, fit work for the King's daughters!

Thomas Wentworth Higginson has an admirable article in the present issue of THE CHAUTAUQUAN on the poet Paul Hayne. It is said that Hayne would never quite forgive Mr. Higginson for having commanded colored troops against the South, though in a letter written just before his death he spoke kindly of his writings. In speaking of this feeling of Hayne's, Mr. Higginson writes, "I never had such a feeling as hatred for the South and think liberty above race! But I am all the more glad to have written for THE CHAUTAUQUAN what is really the fullest account of Hayne that has yet appeared."—Mrs. Mary Liver-

more writes of her important article on "Superfluous Women" in this issue, "I prefer to have it appear in THE CHAUTAUQUAN because so many women read it. To help women has become a part of my religion, and the good work done for them by THE CHAUTAUQUAN and the Chautauqua Assembly have made me a strong partisan of both and very thankful for both."—The exciting ant stories which Mrs. Treat tells in the present issue come with particular force from her pen. Nothing was known of these harvesting ants until Mrs. Treat found them in Florida, a few years ago.

C. L. S. C. NOTES ON REQUIRED READINGS FOR JANUARY.

THE CHRISTIAN RELIGION.

P. 4. "Strauss," David Friedrich. (1808-1874). A German theologian. In his work on the Life of Christ he tried to place Christianity upon a mythical basis, "to resolve the Gospels into popular legends, and the miracles into significant poetry."

"Baur," Ferdinand Christian. (1792-1860). A German theologian. "He denied the authenticity of the Gospel of St. John, and all the Pauline epistles except those to the Galatians, Corinthians, and Romans."

"Renan," Ernest. (1823—). A French writer. His "Life of Jesus" treats the Gospel narrative "as little more than a legendary romance." "He admits the excellence of the Christian religion, but discredits its supernatural origin and rejects the miracles."

P. 5. "Celsus." A philosopher who wrote a treatise against the Christian religion. The original work was destroyed by the zealous early Christians, but a great part of it has been found in the answer written by Origen, one of the most eloquent and influential of the Christian Fathers. During one of the persecutions against the Christians, Origen was imprisoned and put to torture, but finally released. He died shortly after at Tyre, in 253, aged about sixty-seven.

P. 10. "Epicureans." The followers of Epicurus, a Greek philosopher (342-270 B. C.) who taught that pleasure was the supreme good in life.

"Lucretius." (95-51 B.C.). An eminent Latin poet. The poem spoken of is "On the Nature of Things," in six books, and is the only work he left.

P. 17. "Stoics." A school of philosophers founded by Zeno (495—?). Their fundamental maxim was that mankind should live in harmony with nature, and in utter disregard of all external good or evil, indifferent alike to pleasure or pain.

"Terence." (195-159 B. C.). A Roman poet. His writings were noted for the kindness and human sympathy expressed in them.

"Plautus," Marcus Atticus. (254-184 B. C.). A celebrated Roman comic poet.

"Seneca," Lucius Annaeus. (5-65). A philosopher and moralist. He was appointed tutor to Nero, and in after years, having been accused of taking part in a conspiracy against that monarch, he was commanded to put himself to death, which he did by opening a vein while in a warm bath. His writings have been highly esteemed by many eminent persons, while others do not look upon them with much favor.

"Pliny," Caius. (61 A. D. —?). A Latin writer. He was a man of a remarkably kind disposition apparently, and yet he enforced the law which condemned to death all Christians who would not abjure their religious belief. He wrote several books which won great admiration. Nothing is known of the time of his death.

"Trajan," Marcus Ulpius Nerva. (52-117). One of the best and greatest of the Roman emperors, and yet he was guilty of severe persecution against the Christians, and was himself the judge at the tribunal which condemned the martyr Ignatius to death.

P. 18. "Boeckh," August, bök. (1785-1867). A renowned German philologist.

"Nerva," Marcus Cocceius. (32-98). A Roman emperor whose administration was remarkable for its mildness and liberality. He was so pleased with Trajan who was in command of the legions of the Lower Rhine that he adopted him as his son and successor.

"Augustus," Caius Julius Caesar Octavius. (63 B. C.-14 A.D.). The first Roman emperor.

P. 21. "Ulfila." (318-388). A Gothic bishop and writer. His translation of the Scriptures which is now so highly valued by all philologists, was lost for many years, but in the sixteenth century a large part of it was found in a monastery near Cologne; and a smaller portion, in 1820, was discovered in Milan.

"Cyril," St. (820-869). A missionary who went out from Thessalonica among the Slavs. The Slavonic people embrace several groups of nations of the Aryan race, found in eastern Europe and northern Asia. In earliest times they were known under the names of Scythians and Sarmatians. The Russians, Servians, Bulgarians, Poles, and Bohemians are a few of the races included in this great family.

P. 36. "Professor Goldwin Smith." (1823—). An English author and teacher; for several years the professor of modern history in Oxford University. In 1864 he came to the United States, and from 1868 to 1871 he was professor of history in Cornell University. Since then he has removed to Canada, where for several years he was the editor of the *Canadian Monthly*. Since 1874 he has given himself chiefly to literary work.

P. 42. "Brutum fulmen." A harmless thunderbolt.

P. 46. "Dr. Arnold," Thomas. (1795-1842). The distinguished teacher of Rugby School. He was the author of several works chiefly historical and homiletic.

P. 47. "Stanley," Rev. Arthur Penrhyn. (1815-1881). He was better known as Dean Stanley. For several years he was a student at Rugby under Dr. Arnold. In 1864 he became Dean of Westminster. The author of several volumes of history and sermons.

P. 48. "Drogheda," droh/he-da. A town in the province of Leinster, Ireland. For many years it was the head-quarters of the rebellious Irish chieftains and their troops. Cromwell marched against it and soon reduced it to subjection and meted out punishment in such a manner as to make his name still abhorred by the inhabitants. The whole garrison was put to the sword; it is estimated that about four thousand people, many of them unarmed, perished.

P. 56. "Nexus." Connection; tie.

P. 59. "St. Francis." See "Sketches from English History," page III. .

"Jansenists." The followers of Jansen, a Dutch theologian. (1585-1638). His doctrines were in direct opposition to those held by the Jesuits. He denied reason any part in the deciding of religious questions and looked upon philosophy as the source of all heresy, and advocated the doctrine of election. Papal decrees were issued against this party in the Catholic church; they were denounced and persecuted, but in spite of all they

continued to exist and even flourished. They claim that numerous miracles were wrought in their behalf. Many representatives of this faith are still found scattered through Germany. In the Netherlands where they were the most powerful, they have lately coalesced with the "Old Catholic" movement.

"Hume," David. (1711-1776). A great English historian.

P. 61. "Marcus Aurelius." (121-180). One of the greatest of the Roman emperors. His book, written in Greek, called "Meditations", is esteemed one of the best manuals of moral discipline.

P. 74. "Fons et origo malorum." The source and origin of evils.

P. 77. "Omne exit in mysterium." Everything ends in mystery.

P. 84. "Semitic." Pertaining to the family of nations of which the Hebrews, the Syrians, and the Arabs are the chief members."

"Monotheism." The belief that there is but one God.

P. 86. "Spinoza," Benedict. (1632-1677). A Dutch philosopher and a strong advocate of pantheism, the doctrine that the universe taken as a whole is God. For this belief he was excommunicated by the Jews, his people, and suffered much from persecution.

P. 92. "Theodicy." A vindication of the justice of God, in ordaining or permitting natural and moral evil.

P. 96. "Whately," Richard. (1787-1863). An English writer, the Archbishop of Dublin. He is considered one of the founders of the liberal church party.

P. 100. "Cosmogony." The science of the creation of the world.

P. 102. "Anthology." A collection of beautiful passages from authors."

P. 104. "Isocrates." (436-338 B. C.). One of the ten renowned Athenian orators.

"Confucius." (551-478 B. C.). The greatest of Chinese philosophers, and teachers. "Both by his literary works and by the lessons taught to his disciples, he laid the foundation of a most powerful and lasting influence over his countrymen."—Dr. George P. Fisher.

P. 106. "Schelling," Friedrich Wilhelm Joseph, von. (1775-1854). A great German philosopher, and author.

WARREN HASTINGS.

P. 23. "Hafiz." (1300-1390). A famous Persian poet. His collective poems are called the "Divan," and are remarkable for their brilliant imagination.

"Ferdusi." (940-1020) The greatest of the Persian poets, author of "Sháh Námeh", or "Book of Kings."

P. 28. "Augustulus." The last of the Roman emperors of the West. He began his reign in 475 A. D. and in 476 was deposed by Odoacer. The latter was a famous military commander of the Goths, who was in the service of the Romans. He banished Augustulus and was crowned King of Italy, but refused the title of Emperor of the West. This brought to an end the Western Empire.

"Merovingians." The first Frankish race of kings in Gaul. It began in 448 with King Meroveus, who gave his name to the dynasty, and ended with Childeric III. in 752. The latter was deposed by Pepin the founder of the Carlovingian dynasty, and father of Charles Martel. It was owing to the efforts of this son that Pepin was able to assume the title of king.

P. 31. "Juvenal," Decimus Junius. (40-125?) One of the most famous of the Latin satirical poets.

P. 32. "Mucius," Caius. An old legend says that one Mucius went to the camp of Lars Porsena, the Etrurian prince, who was then at war with Rome, and attempted to assassinate him. He was detected in the act, and taken by the guards to the king. During the interview, Mucius put his right hand into the fire and held it there until it was consumed, to show his indifference to the agonizing death to which it was designed to subject him.

The king amazed at this act, so greatly admired the fortitude of the man that he spared his life. The name Scevola, sev'o-la, meaning "left-handed," was given him after this as a surname.

"Algernon Sidney." (1622-1683). An English patriot. He was one of the judges appointed for the trial of King Charles I., but was absent when the sentence was given. After the Restoration, he was arrested as one of the conspirators in the Rye-House Plot, tried before the infamous Jeffries, and beheaded.

P. 34. "Mohurs." Gold coins of the value of about \$7.50.

P. 44. "Catherine." The second empress of Russia bearing this name; the wife of Peter III. There had been trouble between them, and the king thought of divorcing her. But she, far superior to her husband in abilities, gathered around her a strong force of her friends, deposed him, and made herself the ruler of empire. She played an active part in the unjust division of Poland, large shares of which fell into her possession.

P. 45. "Mr. Gleig," Rev. (1796-—). A Scotch divine and author. Lord Macaulay says of his collective writings, they are "three big, bad volumes, full of undigested correspondence and undiscerning panegyric." Mr. Allibone says, "Mr. Gleig's 'Life of Hastings forms a proper companion to Abbott's 'Life of Napoleon.' We can say nothing more condemnatory of both."

P. 53. "Corneille," Pierre, kor'na'ye. (1606-1684). A distinguished French author; the founder of the French drama.

"Cervantes," Miguel, ser-van'tes. (1574-1616). The distinguished Spanish author. He and Shakespere both died on the same day, April 23.

"Horne Tooke." (1736-1812). An English statesman and author. His work on philology, called "Diversions of Purley" was his chief production.

"Woodfall," William. The publisher of *The Public Advertiser* in which the series of letters signed "Junius" appeared.

See Byron's description of Junius in "Vision of Judgment."

P. 54. "Old Sarum." An extinct city and borough of England. It was once the see of a bishop, but in the time of Henry III. this was removed to Salisbury. Although nearly deserted, it continued to send two members to Parliament, until it, with other "rotten boroughs," was disfranchised by the Reform Act of 1832.

P. 58. "Oates," Titus. (1620-1705). The originator of the story of the "Popish Plot." Oates had been an English clergyman but having perjured himself, was obliged to withdraw from his position. He then joined the Catholics, and became one of the order of Jesuits; but on account of his bad character was dismissed by them. He then invented the story of this conspiracy, charging the Catholics with having laid a scheme to kill the king, massacre the Protestants, and place themselves in power. As a result, great numbers of innocent Catholics were put to death. In 1685 Oates was tried, and sentenced to imprisonment for life; but in 1688 was released and received a pension of three hundred pounds a year. Bedloe and Dangerfield were accomplices of Oates.

P. 80. "Lascars." Native sailors, who are employed on European vessels.

P. 86. "Wat Tyler." In the time of Richard II. an attempt to enforce tyrannical labor laws brought on an insurrection known as "Wat Tyler's Rebellion." A tax of twelve pence had been imposed upon every person, man and woman, over fifteen years of age, in order to meet the expense of the war carried on with France. The lower orders of the people were already suffering greatly, being taxed beyond their means. "The immediate occasion of the outbreak was the indignity with which a young maiden, the daughter of one Wat Tyler was treated by one of the brutal tax-gatherers. This outrage so incensed the father that he struck the officer dead with his hammer, and being joined by his friends and neighbors, raised a revolt, placing himself at the head of the insurgents."—Anderson.

"Alguzils." Officers of justice in Spain of about the rank of constables.

P. 89. "Jeffreys," George. (1648-1689). An infamous English judge. He was the agent used by Charles II. when he determined to destroy the Whigs. In order that he might most effectively accomplish this result, Jeffreys was made chief-justice of England. He presided at the trials of all persons accused of having been in rebellion against the Stuart kings. 320 persons were sentenced by him to be hanged, 841 were banished, and many were imprisoned and scourged. James II. made him lord high chancellor of England. At the accession of William III., Jeffreys was arrested and placed in the Tower where he shortly afterward died. (The character of Jeffreys is strikingly and truthfully portrayed in "Lorna Doone," a novel by Richard Dodridge Blackmore).

P. 93. "Louis XI." (1423-1483). One of the most powerful of the kings of France.

P. 98. "Cheye Sing, châte, the ch pronounced as in Charles.

P. 99. "Tamerlane." (1336-1405). A renowned Asiatic conqueror. He subdued most of Persia, and Armenia, a part of Russia, India, and Turkey; and was proceeding against China when he died.

"Hugh Capet." (940-996). A French king, the founder of the Capetian dynasty which succeeded the Carlovingian, and ruled more than eight hundred years, or until the French Revolution, having representatives still in the Bourbon family. It was Capet who selected Paris as the capital of his kingdom.

P. 100. "Sevajee." (1627-1680). The founder of the empire of Mahrattas in India.

P. 101. "De facto." From the fact; by one's own authority. "De jure." From the law; by right.

P. 129. "Zem-in-dars'." Persons who hold land, under the government, and have the right to re-let it.

P. 130. "Lacs of rupees." The word lac means one hundred thousand, and rupee is the name of a coin worth about \$7.00.

P. 131. "Sir Charles Grandison." The hero of a novel bearing the same name, by Samuel Richardson. Miss Byron is the lady he marries.

"Otium Divos rogat." He beseeches the gods for leisure.

P. 142. "Imaun." The leader in the regular service in a Mohammedan mosque.

"Lord George Gordon's riots." Insurrections instituted for the purpose of abolishing the "Toleration Act" passed in 1778, granting privileges to the Catholics. When Gordon, (1750-1793), took his seat in Parliament, and failed to pass his bill for the repeal of this act, his followers, estimated at one hundred thousand persons, immediately began plundering and destroying Catholic churches and other property. At the command of the king, the mobs were dispersed; Gordon was tried, and finally

condemned to five years' imprisonment. He died in Newgate prison.

"Dr. Dodd," William. (1729-1777). An English clergyman, chaplain to the king. He was executed for forging Lord Chesterfield's name to a bond for £4,000.

P. 158. "Siddons," Mrs. Sarah. (1755-1831). A distinguished English actress.

"The historian of the Roman Empire." Gibbon.

"Verres," Caius. (112-42 B. C.). A Roman governor, tried for the cruelty and extortion practised upon the province of Sicily. He was banished from Rome.

"Tacitus," Caius Cornelius. A great Roman historian who lived in the first century. He and the younger Pliny were appointed in the reign of Nerva to conduct the prosecution against the proconsul of Africa, Marius.

P. 172. "Cuddy." A small apartment in the forepart of a boat.

P. 173. "Pundits." Educated Brahmins.

P. 174. "John Williams." A most prolific author of prose and verse of the Della Cruscan School of poetry. This school was composed of sentimental writers of both sexes who gained notoriety by their affectation and their "high-flown panegyrics" on each other. The name of the school was derived from the Academy Della Crusca of Florence, meaning the Academy of bran or chaff, so named because it had for its chief object the purifying and winnowing of the Italian language. Anthony Pasquin, the *nom de plume* of Williams, was a Roman cobbler who lived in the latter part of the fifteenth century and gained a reputation on account of his satirical remarks and stinging speeches.

P. 178. "Trissotin." The name of a foppish rhymster in Molière's comedy, "Les Femmes Savantes."

P. 179. "Dionysius." (430-367, B. C.). A tyrant of Syracuse.

"Frederic," II. King of Prussia. (1712-1763).

"Hayley," William. (1745-1820). An English author. His numerous books were at one time very popular, but they are now considered as possessing almost no merit.

"Seward," Thomas. (1780-1790). His daughter, Anna, (1747-1808), also gained quite a reputation as a poet in her day, but the works of both father and daughter soon sank into oblivion.

P. 182. "Richelieu," Armand Jean du Plessis, rēsh'e-loo. (1585-1642). A noted French statesman.

P. 183. "Cosmo," or Cosimo de Medici. (1389-1464). A celebrated Florentine statesman. A liberal patron of the arts and sciences.

NOTES ON REQUIRED READING IN "THE CHAUTAUQUAN."

THE UNIVERSAL COLOR MAKER.

1. "Dr. Thomas Young." (1773-1829). An English philosopher. In 1800 he began practicing medicine in London, and after a few years was appointed one of the physicians in St. George's Hospital, and still later became sole conductor of the *Nautical Almanac*. For a number of years he was professor of natural philosophy in the Royal Institution. Beside his practice and his teaching, he contributed much, during all these years, to literature in the lines of science and philosophy; he furnished about sixty articles for the "Encyclopædia Britannica."

2. "Sir Isaac Newton." (1642-1727). An English philosopher and mathematician. Before he had finished his twenty-fourth year he had made several remarkable mathematical discoveries. At the time the plague was raging in London, he withdrew to his country seat at Woolstrop and gave himself up to the study of gravity, and discovered the great laws in accordance with which this force acts. The subject of light next occupied his attention, and his important discoveries in this field

were given to the world in a work called "Opticks, or a Treatise on the Reflexions, Refractions, Inflections, and Colours of Light." For several years he was a member of Parliament. It is said that in 1692 occurred the event by which the labor of twenty years was lost,—the burning of his papers, caused by the upsetting of a candle among them by a favorite dog. Newton's failing health at this time was attributed to this cause, although the story is not credited by many. Newton was never married; he died at Kensington, and was buried in Westminster Abbey.

SUNDAY READINGS.

1. "Calais," kā-lā. A seaport town in the northern part of France in the department Pas de Calais, on the Strait of Dover. After its capture by Edward III., it remained in the possession of the English for more than two centuries. In 1558 it was retaken by the French under the Duke of Guise. It was the last spot of French ground which was remaining in English possession. Queen Mary whose health had been slowly failing

under the perplexities of her reign, rapidly sank after this blow. She is reported to have said that at her death Calais would be found written in her heart.

2. "Philippa." (1312-1369). The daughter of William, Count of Holland and Hainault, married to Edward in 1328. She was one of the most popular of all the English queens. She often accompanied her husband on his foreign expeditions, but as frequently remained at home and governed his kingdom in his absence. It is attributed to the influence of her presence at the battle, that the English were enabled to gain the victory at Neville's Cross, over the Scotch who had seized the opportunity of the king's being engaged in war with France, to revolt.

3. "Guido." The full name was Guido Reni, goo-ee' do rā'nee, (1575-1642). An Italian painter, whose pictures are remarkable for their grace and beauty of expression. Among his best known pictures are The Martyrdom of St. Peter, Aurora, and The Massacre of the Innocents.

4. "Rubens," Peter Paul. (1577-1640). A Flemish painter. In 1629 the Flemish court sent him on an embassy to England, to restore, if possible, peace between the latter country and Spain, which he succeeded in doing. Before his return he painted for Charles I. the celebrated allegorical picture, War and Peace. Charles bestowed upon him the honor of knighthood. His pictures soon came into such demand that in order to supply royal orders alone, he could do nothing more than to design, and put the finishing touches upon his works, leaving all the rest to assistants. His masterpiece is generally thought to be the Descent from the Cross. He excelled in portraits and in representing animal life.

5. "Eric, "Biorne," and Thorfinn." Scandinavian navigators. Eric's father had been banished from his native land for having slain an enemy, and had fled to Iceland, taking his son with him. In later years Eric was compelled to leave Iceland for the same reason which had driven his father from Norway. He directed his course toward the southwest and reached Greenland, which henceforth became his home. He was a man extremely superstitious and of a weak nature. Biorne and his father lived in Iceland, where they always passed their winters, but in the summer it was their custom to make trading voyages to Norway. In the year 985, when Biorne returned from one of these voyages he found that his father had gone to Greenland to find Eric. The son immediately followed. He found much difficulty in making the voyage on account of heavy fogs and storms. He sailed too far to the south and skirted the coast of New England; but the knowledge that he was searching for his father kept up his courage, and retracing his way, he finally reached Greenland and there told of the wonderful lands he had discovered. Later he visited and explored these. Thorfinn was an Icelandic merchant who had also joined Eric at Greenland. He there organized an expedition to visit the lands which had been reported by Biorne. The enterprise at its beginning promised great success, but in three years the undertaking was abandoned and the survivors returned home.

6. "Handel," George Frederick. (1684-1759). A great German musician.

OUT-OF-DOOR EMPLOYMENTS FOR WOMEN.

1. "Open Sesame," ses'a-me. The magic pass-word which would cause the door of the robbers' dungeon to open. Ali Baba, hidden away in the branches of a tree, discovers the cave of the "Forty Thieves," and is able to enter it by means of the spell cast by this word, which by accident he overheard. The word is the name of a kind of grain; and the brother, Cassim Baba, having learned this much, stood before the door vainly crying, "Open, Wheat," "Open, Barley," etc. The door could be conjured by no other word than "Sesame." The story is one found in the "Arabian Nights."

2. "O'kra." An annual plant bearing pods which, when green, are much used in the West Indies for soups and pickles.

3. "Kale." One kind of cabbage. Its leaves are curled or wrinkled, and are not formed into a solid head

STUDIES OF MOUNTAINS.

1. "Dew-point." The temperature at which the dew begins to be deposited. It varies according to the amount of moisture contained in the atmosphere; when this is saturated, any reduction in temperature causes the vapor to condense.

2. "Foehn." A hot wind which blows down the mountain sides and along the valleys. On the windward side it is moist; on the leeward side, dry. Over the lakes in Switzerland it comes as a vapor-laden south wind.

3. "Chinook winds." Strong winds blowing in a westerly direction, from the Rocky Mountains, over the adjacent plains. "A long discussion on chinook winds may be read in *Science*, Vol. VII., 1886, for January 8, (pp. 33 and 40), and for January 15, (p. 55)."—*Ernest Ingersoll*.

4. "The height of the snow line on the north side of the Alps is about 8,000 feet [above tide level], and on the south side, about 8,800. Below this limit the glaciers descend 4,500 to 5,300 feet. The snow line in the Pyrenees is 8,950 feet; in the Caucasus, 10,000 to 11,000 feet; on the south side of the Himalayas, 12,980, and on the north side, 16,620; at the equator, in the Andes, 15,980; in Bolivia, 18,520 feet in the western Cordillera, and 15,920, in the eastern; in Mexico 14,760 feet; in Chili, near Santiago, 12,780; in Norway, 5,000 in its middle portion, and 2,300 feet at its northern extremity; in Kamchatka, 5,200 feet; in Alaska, 5,500." (Dana). In the Rocky Mountains the snow line comes from 12,000 feet in southern Colorado to about 8,000 at the British line."—*Ernest Ingersoll*.

5. "Bacteric." The adjective derived from the noun bacteria, which is a name applied to a low vegetable form of life. For a long time bacteria were supposed to belong to the animal kingdom as they possessed the power of motion; but the fact that they took up nitrogen from ammonia compounds decided their position in the kingdoms of nature. They are among the smallest living beings, and are found in the tissues and blood of living animals, in the sap of plants, and in the liquids of eggs, are propagated in water, and their germs are floating through the air. They act as strong ferment, and "play a very important part in both healthy and morbid processes."

6. "Allotropic." Capable of existing in two or more distinct conditions. "Ozone is an active state of oxygen, and is distinct from ordinary oxygen, which is the element in a passive state."

ASTRONOMY, ETC., FOR JANUARY, 1887.

THE SUN.—During the present month the sun travels northward $5^{\circ} 57' 11''$, thus making a perceptible lengthening of the day, amounting, in fact, to 58 minutes. On the 2d, at 3:00 p. m., it approaches nearest to the earth. On the 1st, it rises at 7:24 a. m., and sets at 4:44 p. m.; on the 11th, rises at 7:22 a. m., and sets at 4:54 p. m.; on the 21st, rises at 7:18 a. m., and sets at 5:06 p. m.

THE MOON.—Enters her first quarter on the 2d at 7:00 in the morning; is full on the 9th at 5:12 in the evening; enters on the last quarter on the 16th at 10:02 in the morning; and becomes new moon on the 23d at 9:41 p. m. On the 1st, sets at 11:49 p. m.; on the 10th, rises at 8:21 a. m.; on the 21st, rises at 5:59 a. m.; and on Feb. 1st, sets at 12:32 a. m. She is nearest the earth on the 12th at 12:42 a. m.; and farthest away on the 28th at 1:24 a. m.

MERCURY.—This planet rises on the 1st at 6:03 a. m., and sets at 3:17 p. m.; on the 11th, rises at 6:33 a. m., and sets at 3:33 p. m.; on the 21st, rises at 6:57 a. m., and sets at 4:05 p. m. During the month it has a direct motion of $51^{\circ} 31' 45''$. At 11:00 p. m., on the 16th, is nearest the sun. On the 23d, at 3:06 a. m., is $4^{\circ} 38'$ south of the moon. An early riser with sharp eyes may catch a glimpse of this planet on and near the first of the month.

QUESTIONS AND ANSWERS.

VENUS.—Rises on the 1st at 8:00 a. m., and sets at 5:10 p. m.; rises on the 11th at 8:06 a. m., and sets at 5:32 p. m.; rises on the 21st at 8:08 a. m., and sets at 5:56 p. m. Her diameter increases 0.4" during the month. At 12:01 on the morning of the 9th she attains her greatest distance from the sun; and on the 25th at 2:40 a. m. she is 2° 27' south of the moon.

MARS.—Keeps near the horizon, having on the 1st 19° 45' south declination. He rises as follows: on the 1st, 11th, and 21st, consecutively, at 9:04, 8:48, and 8:30 a. m., and sets on the corresponding days at 6:42, 6:42, and 6:44 p. m. Diminishes in diameter 0.2"; has a direct motion of 24° 12'; is nearest the sun on the 16th at 3:00 p. m.; and at 5:55 p. m. on the 25th is 1° 18' south of the moon.

JUPITER.—This planet increases in diameter 3" during the month; is 90° west of the sun on the 24th; makes a direct motion of 2° 56' 43"; and on the 16th at 9:37 p. m. is 3° 39' south of the moon. Its times of rising are respectively as follows: on the 1st, 11th and 21st, 1:58, 1:38 and 12:50 p. m.; its times of setting on the corresponding days, 12:40 and 12:06 (after midnight), and 11:28 p. m.

SATURN.—Rises on December 31st, 1886, at 6:09 in the evening and sets on the 1st at 7:17 a. m.; on the 11th rises at 5:22 p. m. and sets at 6:30 next morning; on the 21st, rises at 4:38 p. m. and sets at 5:48 on the 22d. Makes 2° 37' 16" retrograde

motion during the month; on the 9th, is 180° from, i. e., in opposition to, the sun; and on the same date, at 5:29 p. m., is 3° 7' north of the moon.

URANUS.—This planet makes a direct motion of 6' 24" up to the 16th of the month, and then a retrograde motion of 4' 6" during the remainder of the month; on the 15th, at 8:27 a. m., is 3° 5' south of the moon; and on the 16th, at 4:00 p. m., it is stationary. It rises on the 1st at 12:54 in the morning and sets at 12:46 in the afternoon; on the 10th, rises at 11:40 p. m., and sets at 11:10 the next morning; on the 20th, rises at 11:00 p. m. and sets at 10:30 on the 21st.

NEPTUNE.—Rises on the 1st at 1:45 p. m., sets at 3:51 on the morning of the 2d; rises at 1:06 on the evening of the 11th, sets at 3:10 on the morning of the 12th; rises at 12:06 on the evening of the 21st, sets at 2:30 the next morning. Motion for the month, 20' retrograde; on the 5th, at 5:24 p. m., 3° 30' north of the moon.

OCCULTATIONS (Moon) —A notable event of the month will be the occultation of *Alpha Tauri* (Aldebaran) on the 6th, between the hours of 5:18 and 6:10 p. m., Washington mean time. The occultation of *f Piscium* takes place on the 2d, between 7:12 and 8:38 p. m.; and that of *f Geminorum* on the 9th, beginning at 8:38 p. m.

QUESTIONS AND ANSWERS.

QUESTIONS AND ANSWERS ON FISHER'S "CHRISTIAN RELIGION."

1. Q. What heavy burden is imposed upon the assailants of the Christian religion? A. To prove that it rests on a false foundation.
2. Q. Is the system of Christianity free from difficulties? A. On the contrary it contains those of a perplexing character.
3. Q. What is the proper question respecting any creed? A. Whether the reasons for it are stronger than those against it.
4. Q. Do Christians really differ in their creeds? A. Only about things not essential.
5. Q. Is all in the Bible respecting natural phenomena strictly true? A. The language may be accommodated to the science of that age.
6. Q. Would error in science destroy the credibility of an inspired teacher of religion? A. Not unless he claim inspiration for his error also.
7. Q. Does true religion ever cause cruelty, persecutions, and wars? A. Never. Fanaticism and perverted moral sentiments are not religion.
8. Q. What new principle did Christianity bring into the world? A. The principle of the brotherhood of man.
9. Q. What always followed the adoption of this principle? A. Strife and hatred gave place to concord and love.
10. Q. Were its peaceful conquests limited? A. The heralds sent into all the world still publish the glad tidings.
11. Q. What is Christianity? A. A religious system whose central truth is salvation through Christ.
12. Q. What distinction is made between revelation and inspiration? A. Revelation is a supernatural insight into truth; inspiration is a divine influence which qualifies one to communicate truth.
13. Q. Was the whole truth at once revealed? A. Its revelation was gradual and progressive.
14. Q. What is said of laws enacted for the Jews? A. Their aim was to reform and finally abolish the evils then existing.
15. Q. How do these Jewish laws compare with those of contemporary nations? A. Their excellence is unapproached by any code of human origin.
16. Q. Was not the ritual of their worship a "bloody code"? A. Their law did not originate sacrificial rites, but elevated and purified them.
17. Q. What can be said of Hebrew servitude? A. Compared with that practiced in other nations, it was a humane institution.
18. Q. Was the slave by that law a chattel? A. He was a man, and had rights that the master was bound to respect.
19. Q. What was the attitude of Christianity toward slavery? A. It taught the equality of men before God.
20. Q. In what character did Paul send back the converted fugitive, Onesimus to his master? A. Not as a servant, but a brother beloved.
21. Q. Why were the Canaanites destroyed? A. Because of their unparalleled wickedness.
22. Q. How does Jehovah account for their doom? A. "The land is defiled, therefore do I visit the iniquity thereof upon it."
23. Q. What facts recorded in the Bible are principally called in question? A. The miracles.
24. Q. What do theists who regard God as a benevolent being allow? A. That a revelation, and miracles to authenticate it, are probable.
25. Q. To what permanent miracle can we appeal? A. To the existence of Christianity.
26. Q. What evidence supports the crowning miracle—the resurrection of Jesus? A. It is established by proofs that can not be invalidated.
27. Q. What is said of the marvelous legends of paganism and popery? A. They lack the essential elements of the gospel miracles.
28. Q. Wherein do they differ? A. The false spring from a previous faith and enthusiasm; the true create faith and kindle enthusiasm.
29. Q. Do the gospel narratives remain as they were given by the apostles? A. The proof of their integrity is stronger than that of any other ancient writings.
30. Q. What made their corruption impossible? A. Their use in different churches, translations, and exact quotations by critical authors.
31. Q. How early were these gospels extant? A. In the life-time of some of the apostles.
32. Q. How early was the gospel of John accepted as genuine? A. In the second century by Irenaeus and his contemporaries.
33. Q. Could these fathers accept a gospel unknown to the martyr Polycarp who himself knew John at Ephesus? A. They could not be so deceived.
34. Q. What is claimed for these gospels? A. That they are truthful narratives of what the writers saw and heard in their intercourse with Jesus.
35. Q. Who were these apostolic witnesses? A. The record shows them competent and true men, neither deceived nor deceiving others.
36. Q. Are there not some discrepancies in their narratives? A. Only such as may appear in almost all independent testimony.
37. Q. May trustworthy historians differ in narrating the same events? A. They do, yet their general credibility is not at all damaged.
38. Q. What is said of the method of Strauss in his attempt to discredit the testimony of the evangelists? A. It violates the rules of sound historical criticism.
39. Q. Are the gospels complete histories? A. They are rather memoirs and facts left out of one may be recorded by another.
40. Q. The existence of God acknowledged, what is the first great fact Christianity presents? A. Man's sinfulness.
41. Q. Does the doctrine of man's sin need proof or argument? A. No; the sad history of the race affirms it.
42. Q. Is the universality of sin a doctrine peculiar to Christianity? A. It is as patent to the unenlightened heathen.
43. Q. Can ethics be divorced from religion? A. No. The springs of its life are in religion.
44. Q. Whence is all spiritual vitality derived? A. From union with God in whom we live.
45. Q. How is communion with God, once lost, mediated and restored? A. Through Jesus Christ, who came to save the lost.
46. Q. What is the most expressive symbol of the relation of Christ to God? That of sonship.

47. Q. May truth too wonderful for us to understand, contain practical lessons that are plain? A. Christ's life teaches this.
 48. Q. If attempts to explain the atonement fail, what remains gloriously true? A. Millions saved find it the way of reconciliation and peace.
 49. Q. Why was not sin prevented? A. Any further interposition to exclude it would have been inconsistent with moral government and man's freedom.
 50. Q. What is the influence of Christianity on society? A. It seeks to mold society according to the principles of justice and love.

QUESTIONS AND ANSWERS ON MACAULAY'S "WARREN HASTINGS."

1. Q. Were the author and subject of this narrative contemporaries? A. Macaulay was a student at Cambridge when Hastings died.
 2. Q. For what was Macaulay distinguished? A. For his brilliant genius, vastness of resources, and easy, graceful style.
 3. Q. When was this memoir first published? A. In the *Edinburgh Review*, about twenty years after Hastings's death.
 4. Q. What were the writer's special advantages for this work? A. Four years' official residence in India gave opportunity for much accurate knowledge.
 5. Q. How was Hastings' boyhood passed? A. Having lost both parents when a child, he was dependent on his grandfather.
 6. Q. What was an object of his earliest ambition? A. To recover the estate once belonging to his father.
 7. Q. How long did the boy remain at Daylesford? A. At eight years of age he was in school at Newington, and at ten, in Westminster.
 8. Q. For what was the lad distinguished while at Westminster? A. In sports and in scholarship he excelled many older competitors.
 9. Q. Why did he not enter Oxford? A. His uncle's death left him in charge of a relative who prevented it.
 10. How did this selfish guardian dispose of his ward? A. He secured for him a clerkship in the East India Company.
 11. Q. At what age did he begin work in this new field? A. At the age of eighteen.
 12. Q. How long did his clerkship continue? A. Two years at the desk satisfied his employers that he was capable of more important service.
 13. Q. How was he next employed? A. As the company's agent at Cossimbazar, a port renowned for the extent of its silk trade.
 14. Q. What interrupted trade with the native brokers? A. War was suddenly declared against the English, and Hastings was taken prisoner.
 15. Q. What occurred after the capture of Calcutta? A. Many English prisoners perished in the Black Hole.
 16. Q. When did Hastings become a soldier? A. Having escaped from imprisonment he met the expedition from Madras and volunteered.
 17. Q. When was he appointed diplomatist? A. When Meer Jaffier was proclaimed Nabob of Bengal,—after the battle of Plassey.
 18. Q. For what did he leave this honorable position? A. To become a member of the council and reside in Calcutta.
 19. Q. What is mentioned as proof of his honesty? A. After fourteen years in India he returned with only a moderate fortune.
 20. Q. How long did he remain in England? A. Four years, when financially embarrassed he again entered the service of the East India Company.
 21. Q. What gave interest to the second voyage? A. The romantic love affair of Hastings and Baroness Imhoff, afterward his wife.
 22. Q. What promotion did he soon receive in India? A. He was appointed governor of the province.
 23. Q. How was Bengal then governed? A. The native prince had honors and emoluments, but the English government was supreme and despotic.

24. Q. What change did Hastings seek? A. To make the English the sole rulers.
 25. Q. How was this accomplished? The nabob at Moorshedabad was put under arrest till the revolution was accomplished.
 26. Q. Through whom did he secure this order for arrest from the directors? A. Through Nuncomar, a rival candidate for the office.
 27. Q. Was Nuncomar's design accomplished? A. No; he did not receive the coveted office.
 28. Q. What was the financial policy adopted? A. The governor resorted to all expedients in order to obtain money to send to the company.
 29. Q. Was Hastings alone responsible for this? A. The requirements of the directors almost forced them to it.
 30. Q. What was the first outrage committed? A. The nabob was robbed of half his salary, and of territory which had been ceded to him.
 31. Q. What most infamous transaction disgraced Hastings and England? A. His army was hired out to Sujah Dowlah for subjugating the Rohillas.
 32. Q. How was the unscrupulous governor rewarded? A. He was made governor general with control over all the Indian possessions of the company.
 33. Q. What assistants were appointed? A. Four councilors, and a Supreme court—Sir Elijah Impey being Chief-Justice.
 34. Q. Did the councilors favor the governor general? A. The majority, led by Philip Francis, opposed him.
 35. Q. What was the result of the suit brought against him? He was pronounced guilty.
 36. Q. How did the accused extricate himself from this perilous situation? A. By denying their jurisdiction, and suddenly arresting the complainant, Nuncomar.
 37. Q. Was his charge against Nuncomar sustained? A. It was, and the Brahmin was summarily convicted and executed.
 38. Q. What was the effect in Bengal? A. His enemies were frightened, and the power of the governor became more absolute than ever before.
 39. Q. What took place at this time in England? A. The resignation of Hastings, committed to a friend, had been accepted, and a new appointment made.
 40. Q. How was this unexpected intelligence received by Hastings? A. He asserted that the resignation was not made according to his instructions, and hence the proceedings were null and void.
 41. Q. How were the conflicting claims settled? A. Hastings with admirable judgment offered to submit the case to the supreme court, and his rival dared not refuse.
 42. Q. Why were all designs against Hastings suddenly dropped? A. In the perilous condition of the country, his talents, experience, and resolution were found necessary.
 43. Q. What nearly ruined the British possessions in South India? A. The sudden invasion of Hyder Ali from Mysore with an immense army.
 44. Q. Were the authorities at Madras prepared for the assault? A. They were not, and resistance seemed in vain.
 45. Q. What great victory retrieved the lost honor of the English arms? A. That of Porto Novo in which Sir Eyre Coote vanquished the enemy.
 46. Q. Did the 200,000 pounds thus gained satisfy the governor? A. It was less than he expected, and this disappointment made him more violent in dealing with Oude.
 47. Q. What was his most infamous proceeding? A. His cruel method of obtaining immense treasures owned by the princesses of Oude.
 48. Q. Why was Hastings to the last popular with the people of Bengal? A. His greatest crimes were committed against neighboring states.
 49. Q. How long did the famous trial of Hastings last? A. Nearly eight years.
 50. Q. How was the verdict of acquittal received? A. With general approval, though it could not erase the memory of his crimes.

THE QUESTION TABLE.

The questions asked in the *Table* are not a required part of the C. L. S. C. work, but merely supplemental. The answers to the questions propounded will be given in the issue of the magazine following the appearance of the questions. The result of the vote on "Opinions" will be published in two months. In sending answers do not write out the question; the number is all that is necessary. Questions sent us by correspondents will be answered in order of receipt. In sending questions it is advisable to state in what connection they were found, or by what suggested.

TEST QUESTIONS ON ENGLISH LITERATURE.

1. To what friend did Spenser dedicate his "Shepherd's Calendar"?
 2. What friend brought Spenser to Queen Elizabeth's noice?
 3. What expressions in Ben Jonson's writings show his admiration for Shakspeare?
 4. The loss of what friend is mourned by Milton in "Lycidas"?
 5. Against what friend on trial for his life did Lord Francis Bacon appear?
 6. What gifted man was Addison's intimate friend for many years?
 7. How old was Pope when he first saw Dryden at "Will's Coffee House"?
 8. What poet was a schoolmate and firm friend of Warren Hastings?

9. The estrangement of what two friends was "laughed away" by Pope's "Rape of the Lock"?
 10. Who was the subject of the following conversation:—"Who is that Scotch cur at Johnson's heels?" was asked of Goldsmith. "He is not a cur," said Goldsmith in gentle scorn. "He is only a burr. Tom Davies flung him at Johnson in sport, and he has the faculty of sticking!"
 11. What friend of Goldsmith took the manuscript of "Vicar of Wakefield" to the publisher, and sold it to pay the author's rent?
 12. To what friend did Coleridge say, "Since Milton I know of no poet with so many felicities and unforgettable lines and stanzas as you"?
 13. What gifted authoress was a frequent guest at Thrale Hall, with Dr. Johnson and Richard Sheridan?
 14. What friend of Cowper told him the story of John Gilpin, and suggested his poem "The Task"?
 15. Which one of Macaulay's friends called him "a book in breeches"?
 16. What remarkable child was a loved companion of Walter Scott?
 17. What poet wrote of what friend,—"None knew thee but to love thee,
 Nor named thee but to praise"?
 18. In memory of whom was "In Memoriam" written?

THE QUESTION TABLE.

TWENTY QUESTIONS ON GEOLOGY.

- Was the surface of the country over which the great glaciers moved during the ice period probably as uneven as it must have been left after the great excavations of the Tertiary age?
- To what cause are such formations as Fingal's Cave and Giant's Causeway to be referred?
- What iron was probably meant in all references to that metal in Scripture, and the writings of Homer and Hesiod, as no method of reducing the ore was then known, and the pure metal rarely occurs?
- What is a talus?
- What island is mainly made up of three volcanoes?
- What volcano has within its pit a lake of melted lava constantly boiling, called "the house of everlasting fire"?
- What volcano has been constantly active for more than two thousand years?
- What name is given volcanic vents whence sulphur issues?
- Whence come the principal supplies of sulphur?
- To what part of geology can the term geognosy be applied?
- What name is often applied to that branch of geology which treats of the chemical, physical, and biological laws governing the formation of the globe?
- What country is noted for the amount of slate stone quarried in it?
- In what rocky formation does lead ore mostly occur?
- Is rock salt ever found on the surface of the earth?
- What is the origin of the expression "salt-licks"?
- Describe the Wieliczka salt mine.
- What fossils received a name derived directly from the Greek verb meaning "I write"?
- From what did the corniferous limestone derive its name?
- How many species of plants belonging to the Carboniferous age have thus far been discovered?
- Is it possible that any fossil remains have ever been obliterated?

RHETORICAL FIGURES.

- What is the origin of figures?
- Give three reasons for the use of figures.
- Are figures the invention of rhetoricians?
- When should figures be used?
- To what class of composition are figures essential?
- How is hyperbole distinguished from falsehood?
- When is antithesis used?
- Define onomatopoeia?
- What figure was an important characteristic of Anglo-Saxon verse?
- Name the figures in the following :-

"O'er me like a regal tent,
Cloudy-ribbed the sunset bent,
Purple-curtained, fringed with gold,
Looped in many a wind-swung fold;
White for music came the play
Of the pied frog's orchestra,
And to light the noisy choir
Lit the fly his lamp of fire."

- What figures in the following :-
- Presence of mind is greatly promoted by absence of body.
- The pew frequently gets beyond the teaching of the pulpit.
- All the world wondered.
- How sweet the moonlight sleeps upon this bank!
- As night to stars, woe luster gives to man.

QUESTIONS ON THE WORLD OF TO-DAY.

- In what country did the commune originate?
- What city did the communists rule, and what was the character of their reign?
- In what country are nihilists most numerous?
- What is their belief?
- Where are socialists most numerous?
- What is an anarchist?
- Are there many in the United States?
- What is the common ground of the four societies named above?
- In what way do the socialists differ from the others?
- Who are the Knights of Labor?
- What is their estimated number?
- Where did they hold their tenth annual convention?
- Who is their chief officer?
- What is the object of the trades-unions?
- In what state did the Mollie Maguires operate?
- In what year did the great strike of railroad employees occur?
- In what city of Pennsylvania did the rioters burn the freight buildings and destroy millions of dollars worth of property?
- Name a city of Ohio where in a riot the county court-house was destroyed, and many lives lost.
- Name a city on the Mississippi where a great railroad strike occurred in 1886.
- Name a city of Illinois where, in 1886, a great railroad strike occurred, and two great strikes among meat packers.

- Name two large cities where, in 1886, the street cars were stopped because of a strike of the drivers.
- Name two cities, the center of a strike of more than 20,000 Knights of Labor employed in knitting mills.
- Name a city where, in November, 1886, nearly 70,000 voters cast their ballots for a labor candidate. Name the candidate.
- What is meant by the "participatory method"?
- What method has been successfully tried by France?

MISCELLANEOUS QUESTIONS.

- From what did the Kit-Kat Club derive its name?
- Give order of rank and privileges of English titles.
- What is an Elzevir edition?
- Why are the lion and the unicorn used in the English coat-of-arms, and what is meant by "the lion and the unicorn were fighting for the crown"?
- Why are the Chinese called celestials?
- What is meant by the "three estates" in "Readings from Macaulay," page 58?
- Where is this quotation to be found, "God tempers the wind to the shorn lamb"?
- What is the "new model" mentioned in the preface of "Green's History"?
- Why is a thoughtful reverie called a brown study?
- Why are the storks in Holland protected by law?

PRONUNCIATION TEST.

Place the correct diacritical mark (according to Webster) over the letters in the following words and then pronounce:-

1. Father.	6. Adult.	11. Hair.
2. Hand.	7. Alarm.	12. Make.
3. Wasp.	8. Mamma.	13. Marry.
4. Ball.	9. Care.	14. Pass.
5. At.	10. Haunt.	15. Crash.

Pronounce the following: First as nouns, then as verbs.

Mouse.	Compact.	Transverse.
Gallant.	Insult.	Export.
Bombard.	Convert.	Compound.
Pervert.	Abstract.	Confine.
Accent.	Perfume.	Alternate.
Compress.	Contract.	Accent.
Rebel.	Project.	Permit.

QUESTIONS OF OPINION.

- What is Shakespeare's greatest play?
- What is Wordsworth's finest poem?
- What is Scott's best novel?
- What is Dickens' best novel?
- Who is the most imaginative of English writers?
- Who is the greatest lyric poet?
- Who is the greatest essayist?
- Who is the most successful translator of poetry?
- What is the best vernacular poem?
- Which of the really great poets is least read?

ANSWERS TO QUESTIONS IN THE CHAUTAUQUAN FOR DECEMBER.

ENGLISH LITERATURE.

- Cædmon. 2. Milton. 3. Edmund Waller. 4. Abraham Felton. 5. In Covent Garden. The rendezvous of the wits, scholars, and poets of the day. 6. Charles II. 7. "True; for my words are my own, my actions are my ministry's." 8. He said one tongue was enough for a woman. 9. Hebrew, Greek, Latin, Italian, French, and Spanish. 10. Dryden. 11. The death of Edward King, a fellow-student of Milton's. 12. Holy Living. 13. Don Quixote. 14. Bigelow Papers. 15. Homer's Circe. 16. Sir John Denham. 17. Isocrates. 18. John Evelyn. 19. Carolina. 20. Richard Lovelace.

THE WORLD OF TO-DAY.

- India and Burmah. 2. Anam. 3. Strait of Gibraltar, Mediterranean Sea, Suez Canal. 4. England. 5. France. 6. Turkey. 7. During the last war between Germany and France, Germany took from France the two provinces of Alsace and Lorraine. 8. The Turkish. 9. To make Constantinople the Russian capital. 10. To obtain an outlet to the Mediterranean for her navy and commerce. 11. The Czar of Russia claims to be the head of the Greek church, and as such, desires to return to the city where his church was founded by Constantine and from which the Turks drove him. 12. England is Russia's sturdiest opponent, and keeps the "sick man" of Turkey on his European throne. England's weak point is India. Hence Russia menaces India. 13. Russia could then pass her fleets through the Dardanelles, enter the Mediterranean, and menace England's short route to India. 14. Bulgaria is the road to the "Golden Horn." 15. Because she wants Salonica and the Adriatic, and does not want Russia to control the commerce of the Danube. 16. To hold her position as the representative German nation. Hence she desires to keep France and Russia from forming an alliance against her. 17. The struggle for the possession of the Turkish Empire and the control of the Mediterranean Sea by Russia, and the determination

of England to protect her water-communication with India, against Russia, France, or any other nation. Other problems enter into it, such as Italy's desire to regain her old supremacy as mistress of the Mediterranean; of Greece to regain Constantinople, Macedonia, and her old inheritance; and of France as a great power on both African and European coasts of the Mediterranean to control its commerce. The old story of Rome and Carthage.

ANSWERS TO MISCELLANEOUS QUESTIONS.

1. The patcher re-patched. 2. Washington Irving in his sketch of "A Creole Village." 3. It was sent by Lafayette to Washington in 1789, and now hangs in the entrance hall of Mt. Vernon. 4. Alexander the Great. 5. William Shenstone, an English poet, born 1714. 6. Henry VII. at the battle of Bosworthfield. 7. By Botticher, in searching for the philosopher's stone. 8. Homer. 9. "There is no royal road to learning." 10. To conceal his death from the natives who had been told he was immortal.

RESULT OF VOTES ON OPINIONS IN NOVEMBER NUMBER.

1. John XIV. 2. Awful. Done. Lay. 3. Coffee. Half. Inquiry. 4. Moses. 5. Nearer Home, by Phoebe Cary. 6. Portia. 7. Sonnet CXVI. 8.

St. Paul. 9. Bible. Shakspere. *Paradise Lost*. Webster's Dictionary. History of the World. 10. Alcohol in any form. 11. In Memoriam. 12. Never put off till to-morrow what you can do to-day.

DICTION.

- When he uses only such words as belong to the idiom of the language.
- The practice of the best writers and speakers.
- To the jargon of gypsies.
- Never.
- Because it is a domesticated word.
- On account of the poverty of the Anglo-Saxon.
- Yes; to characterize the time in which a scene is laid.
- A gross deviation from the rules of syntax.
- It is derived from Soi, a town of Cilicia, the people of which corrupted the pure Greek.
- A violation of purity.
- Yes; our vocabulary must keep pace with our ideas.
- The inaccurate use of a word; named after Mrs. Malaprop in Sheridan's, "The Rivals."
- Never wood, nor tree, nor bush is there.
- There are no more such Caesars.
- No one knows what it is to lose a friend until he has lost one.
- "Please, may I have this?"
- He confessed his crime.
- I can never think so very meanly of him.
- I have nothing more.
- Her vocation is acting.

TALK ABOUT BOOKS.

There could scarcely be a more enticing introduction to a book of travels than to be told that it contains "no information of any value to anybody," is "absolutely bare of statistics, entirely useless as a guide to travelers, and can be of no possible benefit to a student desirous of increasing his knowledge either of foreign architecture, mediæval art, politics, or any kindred subject." The majority of books of travel make an effort at one and sometimes all of these things, and are stale accordingly. The title, "Well-Worn Roads" indicates that nothing new is to be expected in either its pen or pencil sketches, but the title is deluding. Everything in the book is new from one elegant cover to the other. Both pictures and descriptions are entirely unconventional in subject and treatment. There is a Bohemian flavor about the entire work but it is united to a genuine elegance of finish. Mr. F. Hopkinson Smith, the author and artist, has been a journalist, a fact that reveals the secret of the unusual freshness of his book. He collected the matter for "Well-Worn Roads" in European cities, Seville, Cordova, Amsterdam and Venice. Descriptions of real pathos, of rollicking good humor, of tantalizing flirtations follow one another without the least connection. The severest criticism on them is the brevity. The reader catches innumerable glimpses between lines of fun, romance, and beauty; and is half-impatient that more is not told. The varied sketches come equally well from the writer's pen. He can describe his morning when locked in a great church in Seville as spectator of the heart-breaking grief of a newly widowed woman and turn with as strong a pen to the gypsy dance he saw near Granada. He buries you in the possibilities of romance in Seville and in the next chapter you find yourself "in a cab at Amsterdam." Most delightful people he finds and lets you look at them only long enough to see how enjoyable they are; witness Matio, the Spanish water-carrier, the Amsterdam doctor in "picturesque faded green coat, yellow nankeen waistcoat, and red necktie," the "breezy, happy-hearted, bare-footed, sunburned, rosy-cheeked fisherman" of Venice, and above all, Ingenio, "the patient, loyal, gentle, old gondolier." The pictures partake of the elegant Bohemianism of the sketches. They include sixteen full page plates from water-color drawings. These plates are printed in the different tints and by the same process used by Houghton and Mifflin last year in Mr. Vedder's illustrations for *Omar Khayyám's Rubáiyát*. The careless, skillful ease of the drawings and the good choice of subjects are the chief excellencies. To those who look upon a careful execution of details as necessary to the beauty of a picture the drawings will be disappointing. The pretty coquets in head and tail pieces and the small pen-and-ink drawings scattered through the text increase the beauty of the book.

In "The Huguenots and Henry of Navarre" Professor Baird carries on the history of the brave people whose beginning and progress down to the time of St. Bartholomew's Day, he related in his former work entitled the "History of the Rise of the Huguenots." The time covered by this later production comprises thirty-six years during one of the most interesting periods of French history. One of the greatest of the many merits possessed by the work is the perfect candor and the utter freedom from prejudice with which all its statements are made. No faults are glossed over, no virtues exaggerated. The character of the renowned King, who after having fought so long and valiantly on the side of the Protestants at length abjured his faith that he might obtain the throne, and who subsequently secured to the Protestant party the religious liberty for which it had contended, has been carefully, and dispassionately studied. No more accurate account of that "evil genius of France," Catherine de Medici, has ever been written. The book goes into exhaustive details and for this reason will seem heavy reading to all save thorough students of history. It is supplied with a full index and with good maps.

* Well-Worn Roads of Spain, Holland, and Italy. By F. Hopkinson Smith. Boston: Houghton, Mifflin & Co. 1887.

† The Huguenots and Henry of Navarre. By Henry M. Baird. Two Vols. New York: Charles Scribner's Sons. Price, \$5.00.

E-jan

A little sketch remarkable for its originality and pathos is "The Madonna of the Tubs."* The skillful touch of the author's pen has transformed an unattractive commonplace figure, so much of whose time is spent in the ignoble toil of a washer-woman, into a veritable Madonna, the halo from whose presence sheds radiance all around. The glimpses into the lives of characters who move in circles far removed from this humble one, and who form the background of the scene, afford a pleasing contrast. The little lame boy, Rafé, is as beautiful a creation in fiction as one rarely finds.

Those who through his other writings have learned to know Edwin Percy Whipple, America's best and greatest critic, can picture to themselves the treat awaiting them in his "Recollections of Eminent Men."† This modest, unassuming author, whose keen eye nothing could escape, whose kind heart would not allow him to wound, and whose nature was an utter stranger to envy, was peculiarly fitted to review the lives and writings of his great contemporaries. In this present volume are found sketches of Agassiz, Emerson, Motley, Sumner, George Eliot, and several others. No novel, however interesting, was ever written in a style more charming and bright than are these close and exhaustive character studies. Many a bright flash of wit, and many a strain of tender pathos diversify the pages.

"A Signal Success,"‡ contains an account of how the Coston signals came to be adopted by the United States and foreign countries through the efforts of Mrs. Coston. The book is exceedingly entertaining, but is marred in many places by unmistakable evidences of vanity and egotism.

Mr. James Parton | has made the largest and best collection of humorous poetry ever compiled. "From Chaucer to Saxe" is the period embraced. The preface says truly, "There is much nonsense in this book and some folly; but there is more wisdom than either."

"Quizzism, and its Key"§ is a mixture of questions in literature, science, history, biography, mythology, philology, geography, etc., with their answers. It cannot fail to awaken an interest in general study.

Toland's musical verses "Eagle and the Elf"¶ have been adopted as the text for a series of fourteen full-page designs by leading artists. The pretty conceits of the poem are cleverly interpreted in the pictures, which are reproduced in photogravure. Everything about the book is charming including the pretty cloth cover of pearl, pale green, and gold.

Lippincott's have issued an illustrated edition of T. Buchanan Read's "The Closing Scene."** The book comes out in the same style as Gray's Elegy published a year ago by this house and forms an appropriate companion piece for that fine work. The sad, beautiful pictures of the poem are faithfully copied in the numerous fine engravings in the book.

"Womanhood."|| An excellent book to place in the hands of any young

* The Madonna of the Tubs. By Miss Elizabeth Stuart Phelps. Illustrated by Ross Turner and George H. Clements. Boston: Houghton, Mifflin & Co. Price, \$1.50.

† Recollections of Eminent Men. By Edwin Percy Whipple. Boston: Ticknor and Company. 1887. Price, \$1.50.

‡ A Signal Success. The Work and Travels of Mrs. Martha J. Coston. An Autobiography. Philadelphia: J. B. Lippincott & Co. 1886. Price, \$2.00.

| The Humorous Poetry of the English Language. By James Parton. Boston and New York: Houghton, Mifflin & Co. 1886. Price, \$1.75.

§ Quizzism; and its Key. By Albert P. Southwick, A. M. Boston: New England Publishing Company. 1886.

¶ Eagle and the Elf. A Fantansy. By M. B. M. Toland. Philadelphia: J. B. Lippincott Company. 1887. Price, \$2.00.

** The Closing Scene. By Thomas Buchanan Read. Illustrated. Philadelphia: J. B. Lippincott Co. Price, \$3.00. 1887.

|| "Womanhood. Lectures on Woman's Work in the World." By R. Heber Newton. New York: G. P. Putnam's Sons. Price, \$1.25.

TALK ABOUT BOOKS.

woman. The author holds up high ideal and discusses his subject with solemn earnestness. He says, "The crown of honor God places upon the brow is of iron; no light trifles to tickle vainly, but a heavy charge pressing upon the soul beneath."

"Hints for Home Reading" * discusses such subjects as "why young people read trash," "the choice of books," "how to make dull boys read," "plans for reading," etc. These articles need no commendation when it is known they are from the observation and experience of some of the most noted writers of the present time. It is a book that will serve as an excellent guide. It contains valuable hints.

Excellent Selections have been made for the volume "Representative Essays." † The design of this book is to give to teachers and scholars good specimens of English prose, and present the characteristic style of the author. No writers could offer better specimens of literary style than those selected.

BOOKS SUITABLE FOR SUNDAY-SCHOOL LIBRARIES.—Among the books published by the Putnam's are several of peculiar appropriateness for Sunday-School libraries. "The Wonders of Plant Life under the Microscope" ‡ is one. The chapters take up the commonest subjects of microscope work with plants, including cells in all their varieties, pollen grains, stomata, glands, and hairs, touch briefly the physiology of plants, and picture many of the wonders of ferns, mosses, fungi, pitcher-plants, etc. The observations are well described and the plates are accurate.—Thomas Knox has added to his long list of sensible and interesting books for boys a "Life of Robert Fulton and a History of Steam Navigation." ‡ The matter has been wisely selected and is well worked up.—One of the finest series of which we know for a library for the young is the "Story of the Nations." ‡ Each nation which has attained a prominent place in history is to be assigned a volume in the list, and thus far the work has been exceptionally well done. The stories being graphically told and the object, to please the young, never lost.—An entertaining history of "Judas Maccabeus and the Jewish War of Independence," ‡ suitable for the older young people, comes also from Putnam's. The life and condition of the nation at the time of Judas are described, making a very essential foreground for the story. The writer adds descriptions of the country to the details of the history with good effect.

"Soldier and Servant" ‡ is a fine portrayal of ideal girl life. In the hands of the realistic critic of the present times it might suffer severe treatment as being overdrawn; but if its characters might not find counterparts in flesh and blood, as beautiful models for young readers to copy, they make the book one of value.—If the people who usually make the trouble in churches were all readers, and if these readers could recognize their own features when clearly mirrored in a graphic story, it would require no prophetic talent to assert that wherever "Grafenborg People" ‡ found its way, there bitter church quarrels would cease. But as these two conditions will never in all probability be met, the mission of the book will be to plead for a more careful education in the broad principles of Christian charity. And this it does in most emphatic form.—"Etchings from Two Lands" ‡ tells of missionary life in Japan. The book is unpretentious in style, being a simple narrative in which descriptions of the country and people prevail. A brief historical sketch of the land, and the present condition of missions are given. All will find it easy, pleasant, and instructive reading.—Fancy's works are so well known and liked that the simple announcement of one more is all that is necessary to awaken a desire to have it added to the Sunday-School library. "Links in Rebecca's Life" ‡ compares favorably with all of this author's other writings. The links are taken from the history of a bright, high-souled girl who became brave, true woman, and exerted a strong influence for good upon all whom she met.—"The Full Stature of a Man" ‡ is the story of a disastrous railroad accident, brought about by the incompetency of new and cheap hands who had been employed in place of skilled laborers discharged that the company might make more money. This accident was the means of throwing into close companionship for a long time people from widely differing walks of life. Their mutual influence is deftly traced. Those possessing great wealth are roused from their thoughtlessly selfish lives to noble work, while existence is brightened for one who had known toil and sorrow. The conversations regarding the relations between capital and labor are apropos to the times and are full of spice and truth.—The heroine of "The Pettibone Name" ‡ is one of those strong, self-reliant, self-sacrificing characters typical of New England farm life. The many other persons brought into the narrative are well defined and so grouped as to bring out in clearer relief this leading one. The book is well written and full of interest.

*Hints for Home Reading. A series of papers by Edward E. Hale, H. W. Beecher, Joseph Cook, Lyman Abbott, and others. G. P. Putnam's Sons: New York. Price, \$1.00.

† Representative Essays. G. P. Putnam's Sons: New York.

‡ The Wonders of Plant Life under the Microscope. By Sophie Bledsoe Herrick. The Life of Robert Fulton and a History of Steam Navigation. By Thomas W. Knox. The Story of the Nations. The Saracens. By Arthur Gilman. Chaldea. By Zénaïde A. Ragozin. Carthage. By Arthur Gilman. Judas Maccabeus and the Jewish War of Independence. By Claude Reigner Conder, R. E. New York and London: G. P. Putnam's Sons.

§ Soldier and Servant. By Elia M. Baker. Price, \$1.25. Grafenborg People. By Reuben Thomas. Price, \$1.50. Etchings from Two Lands. By Clara Arthur Mason. Price, \$1.00. Links in Rebecca's Life. By Fancy. Price, \$1.50. The Full Stature of a Man. By Julian Warth. Price, \$1.25. The Pettibone Name. By Margaret Sidney. Price, \$1.25. Boston: D. Lothrop and Co.

Many of the scenes in the story called "Which: Right or Wrong?" * are laid on the Framingham Assembly grounds, where a merry group of boys and girls spent many happy days. The strong, earnest words of Dr. Vincent and other able men, heard there, settle into a fixed purpose in the mind of more than one of them, what had been before only longings and impulses to lead a Christian life; and they decide firmly for the right. The influence of their after lives affects many of their companions at home, and thus the good seed brings forth an abundant harvest. It is a strong and healthy story.

—Two pleasing, tender stories of girlhood life which cannot fail to interest young readers are "Ruth Eliot's Dream" * and "Pretty Lucy Mervyn." * Both contain the records of a group of bright, lovable girls, each one of whom possesses a strong individuality of her own. The books are marked by an absence of everything of a sensational character.—"How Marjory Helped" ‡ has for its leading character one of those original, impulsive little people who exert a magnetic influence on all around them. Far from being a book which will simply interest the young, older persons, especially mothers, will find in it that which furnishes food for reflection. How many loving little natures have been thoughtlessly grieved into feeling like Marjory that life would have been so much easier for them if they had only "been born grown up." —No author has entered more fully into sympathy with the lives of young people than has Sophie May. Her books are filled with sketches of just such characters as one would like to know. Her boys and girls are bright, ardent, fun-loving; possessing, it is true, many faults, but having also kind hearts and strong wills which help them to overcome the wrong and seek the right. The "Quinnebasset Series," * called her "grown up book," contains five as fresh and delightful volumes as can be found anywhere for the Sunday-School.

Geikie's "Life and Words of Christ," † issued in 1877, should have a place in every Sunday-School library. So vividly are the places and events connected with Christ's life portrayed, that one feels as if he were a witness of the scenes rather than simply a reader of their descriptions. The high standard of the work has placed it in such demand that at least twenty-five editions of it have been published in England, and several in this country.—Professor Smith, who has given long and close study to the Old Testament writings, has presented some of the results to the world in two books, "The Old Testament in the Jewish Church," and "The Prophets of Israel." The design of the former is to arouse Bible readers to acquire for themselves that mental discipline which will enable them logically to refute false criticism. In the latter work he treats of modern Biblical science. Though both are too scholarly to be generally read, earnest Bible students and teachers will find them of great value.—"Why We Believe the Bible" † is a small book arranged in the form of questions and answers. Its nature may be judged from the quotation which is its opening sentence, "Be ready always to give an answer to every man that asketh you a reason of the hope that is in you." The questions are such as both an honest inquirer and an unbeliever might ask; and the answers are direct and convincing. The history, chronology, and authenticity of Revelation, and the objections brought against it are considered. Teachers will find it an excellent reference book.—The Series of Early Christian Literature Primers; by the Reverend George A. Jackson, provides the means of becoming acquainted with the early ecclesiastical writings through accurate translations and summaries. The explanatory observations are in accord with the latest and soundest criticism, and free from the influence of a theological bias.

"Transformed" ‡ is a well-written, impressive story. It shows how the influence of a generous-hearted, noble boy was sufficient to bring back to a true, good life, a hard-hearted man of the world. It is a book which will do all boys good.—"Boys' Own Stories" ‡ contains a series of episodes originally written by the boy heroes themselves. Many of them have been translated from foreign languages, and all have been recast; and the result is a very entertaining book. Such vivid glimpses into European history are given as will lead the readers to desire a fuller knowledge of the events.—Boys will find in "Charlie Lucken" ‡ a most attractive book. It is the story of the school and college life of a boy, who was always getting into trouble, and whose "good luck," as the other boys said, always helped him out again. His good luck, however, was nothing more nor less than a kind nature, good principles, and lofty ideal of the right.

The usual assortment of bright cards come from Messrs. Prang & Co. They are in variety to suit every taste. The subjects and treatment include the humorous, the artistic, and the purely decorative. Among the novelties of the season one of the most attractive is a folding calendar "Ye Merrie Months of 1887."

* Which: Right or Wrong? By M. L. Moreland. Ruth Eliot's Dream. By Mary Lakeman. Pretty Lucy Mervyn. By the same. Price of each, \$1.25. How Marjory Helped. By M. Carroll. The Quinnebasset Girls. Our Helen. Janet. The Asbury Twins. The Doctor's Daughter. Price of each, \$1.50. Boston: Lee and Shepard.

‡ The Life and Words of Christ. By Cunningham Geikie, D. D. Two volumes in one. The Old Testament in the Jewish Church. The Prophets of Israel. By W. Robertson Smith. Why We Believe the Bible. By J. P. T. Ingram, S.T.D. The Apostolic Fathers. The Post-Nicene Latin Fathers. The Post-Nicene Greek Fathers. The Fathers of the Third Century. By the Rev. George A. Jackson. New York: D. Appleton and Company.

§ Transformed. By Florence Montgomery. Boys' Own Stories. By Ascroft R. Hope. Charlie Lucken. By the Rev. H. C. Adams, M. A. Price, \$1.50. Philadelphia: J. B. Lippincott Company.

¶ L. Prang & Co. Cards and Novelties. Season of 1886-7. Boston, Mass.

Gay pictures and bright, musical rhymes make the typical child's book. Both are found in Mrs. S. J. Brigham's "Under Blue Skies." Faulty figure-drawing mars the pictures somewhat, however, and the application of the colors is not quite as successful as in most of Worthington's work. Nevertheless the book is remarkably pretty.

The Chautauqua photographer, Mr. L. E. Walker, sends us a panel photograph, 16x21 inches in size, of the C. L. S. C. alumni. The picture was taken last summer on the lawn of the Hotel Athenaeum. Over three hundred faces may be counted in the group, nearly all of which can be easily recognized. Mr. Walker also has several fine new Chautauqua views. Catalogue of his stock with prices can be obtained by addressing him at Warsaw, N. Y.

*Under Blue Skies. Verses and Pictures. By Mrs. S. J. Brigham. New York: Worthington Co.

BOOKS RECEIVED.

Half Married. By Annie Bliss McConnell. Philadelphia: J. B. Lippincott Co. 1887.

Solomon Grinder's Christmas Eve. By Clara Moyse Tadlock. Boston: D. Lothrop & Co.

St. Nicholas. Volume XIII. New York: The Century Co.

Catholicity—True and False. By George P. Fisher, LL.D. New York: Charles Scribner's Sons. 1886.

Outline of Lectures upon Political Economy. By Henry Carter Adams. Ann Arbor. 1886.

Veazie's Four-Part Song Reader. By George A. Veazie. Boston: Ginn & Co. 1886.

First Weeks at School. Boston: Ginn & Co.

The Study of Latin in the Preparatory Course. By E. P. Morris. Boston: D. C. Heath & Co. 1886.

How to teach Reading. By G. Stanley Hall, Ph.D. Boston: D. C. Heath & Co. 1886.

The Parts of Speech and How to use them. By Mrs. W. L. Knox-Heath. Boston: Ginn & Co.

New First Music Reader. By Luther Whiting Mason. Boston: Ginn & Co. 1886.

Columbia bicycle calendar. Boston: The Pope Manufacturing Co.

Stanley Huntingdon. A novel. By Sidney J. Wilson. Philadelphia: J. B. Lippincott Co. 1887.

The Boy Wanderers; or, No Relations. From the French of Hector Malot. By the author of "Christy Carew." Philadelphia: J. B. Lippincott Co. 1887.

Red Beauty. A story of the Pawnee trail. By William O. Stoddard. Philadelphia: J. B. Lippincott.

SUMMARY OF IMPORTANT NEWS FOR NOVEMBER, 1886.

HOME NEWS.—Nov. 1. Decrease of public debt during October, \$13,201,619. Nov. 3. The Vermont House of Representatives pass a bill granting suffrage to women.

Nov. 4. Thirty-seven Apache Indian children enter the school at Carlisle, Pennsylvania.

Nov. 5. Harvard celebrates its two hundred fiftieth anniversary.—Earthquake shock in North and South Carolina and Georgia.

Nov. 8. Death, in Mobile, of Captain William H. Gardner, president of the National Cotton Exchange of America.

Nov. 9. Eight hundred coal miners near Denver, Colorado, leave work because of reduction of wages.

Nov. 10. Delegates from twenty-two states meet in Chicago at the thirteenth annual convention of the National Butter, Cheese, and Egg Association.

Nov. 11. Death of Dr. Archibald Hodge, of Princeton College, aged sixty-three.

Nov. 12. Burning of St. Peter's Cathedral, Pittsburgh, Pennsylvania.

Nov. 13. Fire at Louisville, Kentucky; loss, nearly a quarter of a million of dollars.

Nov. 14. Dr. Storrs preaches his fortieth anniversary sermon, Church of the Pilgrims, Brooklyn.

Nov. 15. Chicago packing house strikers return to work.

Nov. 17. Two barges wrecked off Kewaunee, Wisconsin; eight lives lost.

Nov. 18. Death of ex-President Arthur at his home in New York, aged fifty-six.—A land-slide near Pittsburgh, Pennsylvania, wrecks an express train.

Nov. 19. Two lumber-laden barges wrecked off Frankfort, Michigan; fourteen lives lost.—An ore-laden barge sunk near Washburn, Wisconsin; all the crew drowned.

Nov. 21. Death of Hon. Charles Francis Adams, at his home in Boston, aged seventy-nine.

Nov. 23. Death of H. M. Hoxie, president of the Gould southwest system, in New York city.—Collision of two freight trains on the Chicago and Alton railroad.

Nov. 25. National Thanksgiving Day.—Death of Hon. Erastus Brooks, editor of the New York *Express*, at his home on Staten Island, aged seventy-one.

Nov. 26. Colliery explosion at Wilkesbarre, Pennsylvania.

Nov. 27. A fire in Duluth, Minnesota, destroys two grain elevators, and nearly a million bushels of grain.

Nov. 28. Strike of four thousand glass-blowers in Baltimore.—The great leather-workers' strike in Massachusetts declared off.

Nov. 30. Destructive fires at Aiken, South Carolina, and Raleigh, North Carolina.

FOREIGN NEWS.—November 1. Sir Michael Hicks-Beach reports to the British cabinet that the prospects are good for a peaceful winter in Ireland.—England instructs her ambassador to insist upon an immediate conference at Constantinople to consider the Bulgarian situation, and to demand

the suspension of Russian intervention. Turkey and Italy favor the proposal, Russia, France and Austria oppose it, Germany and Austria remain neutral.

Nov. 2. France fails to secure allies in its Egyptian policy.

Nov. 3. The Bulgarian deputies, in a private session resolve to oppose the Russian party.

Nov. 4. A native regiment in Afghanistan annihilated by rebels.

Nov. 5. Great damage caused by a cloud-burst over the lake region of England. In Bulgaria, an order grants amnesties to regiments that assisted in the deposition of Prince Alexander.

Nov. 6. Death of Viscount Barrington, aged sixty-two.

Nov. 7. Death of Joseph Aubanel, "the French Petrarch," aged fifty-nine.

Nov. 9. Processions in honor of Lord Mayor's Day in London.—Death of Dr. Wilhelm Loewe, the German Liberal politician and leader, aged seventy-two.

Nov. 10. The Duke of Connaught appointed commander of the forces in Bombay.—The Bulgarian sovereign elect Prince Waldemar successor to Prince Alexander.

Nov. 11. Death of Paul Bert, the French minister resident in Anam.—Close of the British colonial exhibition. Average daily attendance, 33,846.—Great damage caused by floods in Italy and the south of France.

Nov. 12. The King of Denmark, in behalf of his son, Prince Waldemar, declines the Bulgarian throne.

Nov. 13. The regents of Bulgaria resign upon receiving the telegram from the King of Denmark.

Nov. 15. A train near Marseilles, France, overwhelmed by a land-slide.—Six American citizens arrested in Southern Russia for preaching in an orthodox assembly of Russians.

Nov. 16. Prince Nicholas of Mingrelia is designated by Russia to fill the Bulgarian throne. The other powers approve the choice.—Frimstein, Switzerland, destroyed by fire.

Nov. 17. The Knights of Labor propose to boycott all Chinamen in British Columbia.

Nov. 19. Austria, England and Germany propose that the line be permanently drawn between Bulgaria and Eastern Roumelia before Prince Alexander's successor is elected. Russia objects.

Nov. 21. A parade in London of 50,000 socialists.

Nov. 22. Germany refuses to protect the Bulgarian conspirators.—The Russians in Bulgaria placed under French protection.

Nov. 26. An agitation is started in Bulgaria, to secure the nomination of Prince Emanuel Vogrides to the Bulgarian throne.

Nov. 27. The European nations are enlarging their armies, with the belief that war will begin in the spring.—France and Mexico concluded a treaty of commerce.

Nov. 29. General Kaulbars arrives at Odessa on his way to St. Petersburg, bearing assurances of friendship from the sultan to the czar.

THE CHAUTAUQUA TEACHERS' READING UNION.

LEWIS MILLER,

Pres. Chautauqua Board.

President—Thomas W. Bicknell, Boston.

Cor. Secretary—B. C. Gregory, Newark, N. J.

Registrar—Kate F. Kimball, Plainfield, N. J.

JOHN H. VINCENT,

Chancellor.

THE THREE YEARS' COURSE OF STUDY.

The Required Readings will be distributed as follows :
First Year. (1) Principles of Education, (2) Methods of Education, and (3) General History.

Second Year. (1) History of Education, (2) Primary and Kindergarten Work, and (3) General Culture.

Third Year. (1) Psychology, (2) School Economics and School Supervision, and (3) Political Science.

SUBJECTS FOR FIRST YEAR'S COURSE.

1. Principles of Education. White's "Elements of Pedagogy."
2. Methods of Teaching. Baldwin's "School Management."
3. General Culture. Barnes' "General History."
4. Socratic League Leaflets, on Practical Topics for Teachers, will be furnished the members from time to time without added cost.

Books for Second or Third Years will be named to those who have read the First Year's Course.

Annual Membership Fee, Fifty Cents.

REGISTRATION IN C. T. R. U.

Miss Kate F. Kimball, Plainfield, N. J., is the Registrar of the C. T. R. U., and persons wishing to become members will write to her, enclosing in the letter the annual membership fee for each applicant.

On receipt of the money, Miss Kimball will return a certificate of membership in the C. T. R. U., the holder of which will be entitled to the privileges of the Socratic League.

Please write the first name in full, and be particular as to the post-office address. Any change in the address of any person should be made known at once to the Registrar.

HOW TO ORGANIZE LOCAL READING CIRCLES.

First :—Let those who have signified a willingness to become members assemble at some house conveniently located for the purpose and select from the number some one for a leader.

Second :—The first step of the leader should be to enroll the members, take the membership fee, and furnish to each a membership receipt which will entitle the holder to all the rights and benefits of the Circle.

Third :—Adopt a constitution, if deemed advisable, and elect the following officers : A president, a vice-president, a secretary, a treasurer, an executive committee, and such other officers as may be deemed necessary.

Fourth :—Arrange the books, deciding whether one, two, or three books are to be taken up at the same, time and if more than one, the order in which they are to be pursued.

Fifth :—Have an evening on which to meet each week or semi-monthly as the majority of the members may prefer. Announce time and place of each meeting and points to be noted in the reading, and you are ready to begin the work.

The following additional suggestions as to the subsequent meetings may not be out of place :

I. Have on the table a dictionary and such other reference books as may be considered desirable.

II. Form the Circle around a convenient table and have memorandum or scratch books provided for taking notes.

III. The leader should call the roll and find how far each has read ; mark important points and note difficult words or peculiar statements in the reading of the evening.

IV. Interesting paragraphs may then be pointed out by the members.

V. Statements and notes from other sources may be given with illustrations, experiments, etc.

VI. Determine the work and points to be made for the succeeding meeting.

VII. General discussion and miscellaneous business.

VIII. Meetings may be enlivened with music, recitations, and other literary exercises, as the tastes of the members may suggest.

An occasional rest or break in the exercises of the evening may sometimes be found advisable unless the interest in the work is such as to advise no break in the proceedings until the end of the session.

STATE BRANCHES.

In response to the inquiry as to the formation of state organizations of the C. T. R. U., we have prepared the following general plan, subject to such local adjustment as the circumstances may demand.

THE BRANCH OF THE CHAUTAUQUA TEACHER'S

READING UNION.

State Organization.

Officers ; Elected by State Association or otherwise.

1. General Counselor.

2. President.

3. Vice-president.

4. Recording Secretary and Treasurer.

5. County or District Managers.

6. Local Leaders (town).

COURSE OF STUDY.

Time, three years.

Course, determined by General Counselor.

One book optional with State Council.

Examinations, diplomas, seals, etc., to be supplied by Chautauqua University.

RECEIPTS AND EXPENSES.

Annual membership fee, Fifty cents per member.

For state and local expenses, Ten cents per member.

General expenses borne by Chautauqua University.

AN OPEN LETTER TO C. L. S. C. MEMBERS.

My dear Friend:

We are now busily engaged in forming Circles of the Chautauqua Teachers' Reading Union, a Department of Chautauqua University, organized for the general and professional culture of teachers and candidates for teaching.

Our system has two departments : the one a reading department which requires no examination, but which depends upon the personal ambition and enthusiasm of the reader, and the other, the same course, for teachers who wish the most rigid examinations ;—such efforts on their part being rewarded by seals of peculiar attractiveness and value.

We wish to extend the benefits and advantages of the C. T. R. U. to teachers and others interested in your community and town, and we invite your personal interest and co-operation, inasmuch as your experience makes you an excellent person to give suc-

cess to the popular educational movement, which promises so much for the teachers and schools of the country.

Will you consent to use your influence in securing individual readers, or, what would be much better, in organizing a Local Circle in your place, developing a "Socratic League," opening up a new world of ambition and effort to teachers of our public schools?

On application our Bulletin will be sent you, setting forth our plans and methods, and we shall be glad to hear from you at once with reference to the formation of a Circle or Class, which will receive our first Diploma of Graduation in 1889. If you have not time, or for any reason cannot attend to the matter, will you not name some other energetic and interested party to look after it.

May we not depend on your co-operation?

Yours in the cause of education,

THOMAS W. BICKNELL, President C. T. R. U.

We commend the letter of President Bicknell to the enthusiastic interest of all members of the C. L. S. C. They can with a little effort give a great impulse to this new department of Chautauqua University. The effort will strengthen the C. L. S. C. movement as it will enlist a band of co-workers and allies, who will also in due season take up other departments of Chautauqua work.

The Board of Control have changed the membership fee from one dollar to fifty cents, making it uniform with the membership fee in the C. L. S. C., and with State Reading Circles in several of the Western States.

AMONG OUR LETTERS.

M. P. H.—We have about decided upon the following: White's "Elements of Pedagogy," Page's "Theory and Practice," Barnes' "General History." Have we chosen wisely?

Ans.—Very wisely. Page is an excellent substitute for Baldwin. In Barnes' "General History" the required reading for first year is the *Mediaeval Period*, page 312.

H. P. B.—Please inform us whether examinations are monthly, or at the close of the year's work. I desire to take the full examinations, but as my teaching requires much more time than is given by many teachers, I doubt whether I can thoroughly accomplish the reading in the given time. If I can not, will it be possible to extend the time through the summer?

Ans.—The examinations will be given at the end of the year, which will be in June, 1887. In special cases like yours the examinations may be taken later.

C. T. S.—I am highly pleased with the course laid down for the first year. I have read several of the books recommended and have found them so good that I read them as a child does its favorite fairy tale.

J. A. O.—I am a member of the New Jersey Teachers Union and am thinking of forwarding my 50 cts. and becoming a member of the C. T. R. U. Now, in case I wish to take the special examinations for gold seal, what charge (extra) will there be? Will the examination be similar to the C. L. S. C. examination, or more searching? Will I in such a case have to go before some committee to be examined and thus be at expense, or will examination be by correspondence? Will work done in this department of Chautauqua University count in course for "A. B.?"

Ans.—There are no extra charges to the membership fee, which is now fifty cents to all members. The examinations will be like those of the C. L. S. C., and will be by correspondence. Work done in the Chautauqua University will be credited of value in all schools and colleges, though it may not secure a degree.

SPECIAL NOTES.

Mrs. Rosie E. Baketel, of Greenland, N. H., is the authorized manufacturer and dealer in Graduates' Garnet Badges, for the coming year, and all who desire them must obtain them of her. This badge is to be worn on all Special and Memorial Days. The white badges, of both the undergraduates and the graduates, which are to be worn at Local Circles, and general meetings of the C. L. S. C., are to be obtained directly from the office of the C. L. S. C., at Plainfield, N. J.

Prizes have been offered by the Chautauqua authorities for the best short stories on Chautauqua life and the influence of its institutions. Here is an outlet for the world of observation and experience which have come into existence with the "idea." The time for closing the story-box is extended from January 15 to February 1, copies to be sent to Mr. W. A. Duncan, Syracuse, New York.

The C. L. S. C. Class of 1884 has bought a cottage at Chautauqua for a Class Home. All the other classes in the C. L. S. C. have done this, or are arranging to do so. The first to set this good example was the first class—the "Pioneers" of 1882. Our "Irrepressibles" follow next in order. A fine cottage well furnished and excellently located between the building of the "Pioneers" and the Hall of Philosophy was purchased near the close of last year's assembly for seven hundred dollars cash. The building above, cost beside furniture over eight hundred dollars, and the last cost one hundred fifty dollars—all secured for seven hundred. Every classmate is urgently invited to assist by personal subscription in meeting the debt of six hundred incurred in paying for the Class cottage. Many devices of a social and private character are suggested toward raising the money. Among others we present the following plan to our own classmates and well-wishers whether of the C. L. S. C. or not.

Mr. L. E. Walker, the Chautauqua photographer, guarantees to the Class of 1884 a goodly percentage on every picture from his department which we sell. These sales are to our own classmates, or to any other persons whom we wish to supply. It is, therefore, of special importance that five hundred dollars' worth be sold at once, that the percentages may aid in immediate payments on our new cottage at Chautauqua.

An attractive catalogue of Mr. Walker's celebrated Chautauqua views has been made at the special request of Prof. W. D. BRIDGE, Plainfield, N. J., the Treasurer of the Class of 1884, and contains a good variety of beautiful photographs. Orders for pictures should be made directly to him. He can also furnish you either a stereoscopic or cabinet view of our own Class Cottage with Group, including President LEWIS MILLER, Chancellor J. H. VINCENT, and others. Any one sending \$1.00 as a contribution to the cottage-fund shall receive both of these pictures; or sending fifty cents, shall receive one of them.

The Chautauqua summer season of 1887 is already thoroughly planned. Secretary Duncan has issued a complete Chautauqua catalogue for 1887 giving in detail the several departments under which the work will be carried on. Any one can obtain a copy by writing Mr. Duncan at Syracuse, N. Y. A new and promising feature of the summer will be the institute of music. Among the platform attractions will be Miss von Finklestein of whom Chancellor Vincent writes that she is having marvellous success in England. At this date some thirty prominent lecturers of the country have been invited to speak.

The extracts from Bishop John F. Hurst, used in the Sunday Readings in THE CHAUTAUQUAN for October and December, should have been credited to his book, the "Success of the Gospel, and Failure of the New Theologies." This book is from the publishing house of Wilbur B. Ketcham, New York.

ATTENTION: NEW ENGLAND '87'S.—At the New England Assembly at Lake View, South Framingham, the Class of '87 was well represented, about three hundred members being present. The Class head-quarters, centrally located and prettily decorated, seemed to be appreciated by the class, and social groups of Pansies often gathered there. Frequent class meetings were held and the class prayer meetings well attended and thoroughly enjoyed. A delightful spirit of loyal class-fellowship prevailed. Preliminary steps were taken in relation to the fifth re-union of the class, which is to be held in the parlors of the New England Conservatory of Music, Franklin Square, Boston, on Saturday, January 8, at half past one o'clock, p. m. It is desirable that a large number be present at this reunion, as important business will be considered. A pleasant musical and literary entertainment will be given by members of '87. Friends of the class will be welcome.

OUR UNIVERSITY PAGE.

The new Principal of the Chautauqua College of Liberal Arts has already begun his work for the summer session at Chautauqua in 1887. The schools will be conducted on a grander scale than any enterprise of the kind ever attempted. There will be two general departments of this work. One will be composed of all the classes in language, and will be directed by Prof. Edward Olson of Chicago. The other will comprise all classes in science, philosophy, mathematics, and history. This will be directed by Prof. Richard S. Holmes of Plainfield, N. J. The plans for these schools are already well along toward completion.

The Schools of Language at the summer meeting of 1887 ought to be thronged by students. No summer school has ever attempted to provide such varied opportunities and of so thoroughly valuable character as will be offered at Chautauqua next season. Classes will be organized in Hebrew, Sanskrit, Assyrian, Arabic, Latin, Greek, French, German, Spanish, Italian, Early-English, and New Testament Greek.

The interest in the correspondence work of the College of Liberal Arts continues unabated. This is very gratifying to the authorities. More new students were added to the various schools in the month of October just past than during any other month of our previous history. The third year has fairly begun, and reports so far received are most gratifying as to the nature of the work. In the English School, Prof. McClintock is printing in neat leaflets his directions to students, and his lesson assignments. The course of study in this school has been thoroughly reconstructed and rendered practicable and possible for all.

A change has been made in the French department of the College of Liberal Arts. Prof. A. de Rougemont of Brooklyn, N. Y., is the new incumbent of this chair. He is Professor of the French language and literature in the Adelphi Academy of Brooklyn, and is one of the most successful and popular of all the teachers in that famous institution. He has lately become even more favorably known by a work on French literature which has received very just praise from the critics of the Metropolitan press. He has at present the largest class that has yet pursued the study of French by correspondence under University auspices. Prof. de Rougemont will be at Chautauqua as teacher of French in the summer school.

The success which has attended Principal Harper as a teacher in western schools seems to be undiminished by his transfer to Yale. The students in the Theological school are giving attention to Old Testament studies with an enthusiasm which is quite unusual. The study of Oriental languages is doing much to produce a better understanding of the history of those early ages, and to Dr. Harper is largely due the impulse toward the pursuit of those studies which is one of the characteristics of the scholarship of this decade.

A handsome pamphlet will be issued by the Registrar of the University about February 1, 1887. It will contain full information concerning the very things that persons contemplating a visit to Chautauqua desire to know about. The cost of living while there, the cost of tuition in the schools, the books which the student ought to bring with him, the names and addresses of the teachers, the plans for study and full outlines of the methods to be pursued will be included in it. Any person specially interested to have one of these announcements may obtain it by writing to the Secretary, W. A. Duncan, Esq., Syracuse, N. Y. All applications for this pamphlet will be filed, and the pamphlets will be dispatched in the order that applications are received.

Will New Testament Greek be taught at Chautauqua next summer? Yes; Dean Alfred A. Wright will be present during the whole six weeks of the session. All ministers and teachers who desire to pursue this interesting study under one who has made it a specialty and has achieved marked success in his teaching, will find here a rare opportunity.

It is we think a matter of special interest to readers and members of the C. L. S. C. that the work to be done in history at Chautauqua in the season of 1887 will cover the ground traversed by the circles in the present year. The general subject of Mediaeval and Modern History will be explored in a course of lessons based upon the history of the church in those times, while a series of special lessons will invite students to investigation of the particular field which English history opens.

Prof. Frederick Starr of Coe College, Iowa, will have charge of the classes in Geology and Botany. Prof. Starr is an eastern man, a graduate of an eastern college, entitled to the degree of Ph. D., *pro merito cum laude*, a member of the American Society of Microscopists, and favorably known as a specialist in the natural sciences. He is at present making a special study of the Geology of Chautauqua County, with a view of helping each student to do practical work in the locality of his own home. The cabinet already secured and arranged will be used as a basis for direction in making amateur collections. Students of the C. L. S. C. who have been pursuing the subject in "Walks and Talks" will find a new incentive to this work, and inspiration in pursuing it under the able direction of Dr. Starr.

The enlargement of the boundaries of our summer educational work makes room for a school of Mathematics in the shade of the forests. Dr. E. H. Moore, Jr., of the Northwestern University of Evanston, Ill., will be the Professor of Mathematics.

We confidently hope to see one thousand students attending the Summer schools in 1887. Facilities for accommodating even a larger number will be provided. Teachers of experience in almost every subject of study have been engaged. A most attractive program is being prepared. Efforts will be made to secure railroad transportation at reduced rates. Members of the C. C. L. A. who are pursuing courses by correspondence, ought to avail themselves of the opportunities which are thus placed before them. A college graduate, looking forward to the work of teaching can get better hints for methods of work by a six weeks' attendance at these schools than he can find in the same time anywhere else in America. Moreover, Chautauqua is a delightful place in which to pass a vacation.

Prof. R. S. Holmes will give two courses of lessons in history in connection with the Summer schools. One will consist of twenty-eight lessons in English history, and the other of an equal number in the history of the Christian church. The first course will be arranged in four divisions of seven lessons each. The first of these will simply tell the story of the people; the second will treat of the epochs into which the history is divided; the third will attempt a careful study of its great events; the fourth will be a review of all the preceding work as suggested by the lives of the great characters who have figured in that history. The same method will be followed in the school of Church History. This notice is particularly commended to members of the Normal Classes of former years who are familiar with Prof. Holmes' methods.